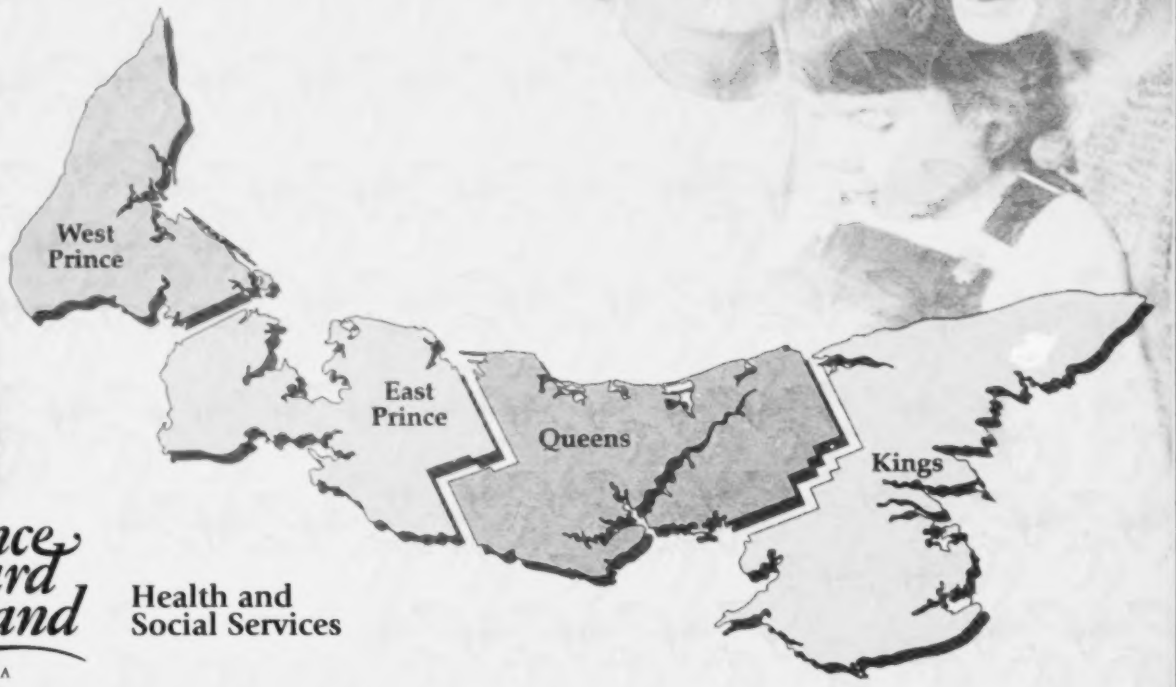
Prince Edward Island Health Indicators

Provincial and Regional

- *Health Status*
- *Non-Medical Determinants of Health*
- *Health System Performance*
- *Community and Health System Characteristics*

December 2004



Prince Edward Island
CANADA

Health and Social Services

105-02728/

Prince Edward Island
HEALTH INDICATORS
Provincial and Regional

Dr. Linda Van Til
Epidemiology Unit

December 2004

Health and
Social Services

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Island Information Services
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EXECUTIVE SUMMARY

The 2004 PEI Health Indicators; Provincial and Regional Report attempts to describe the complexities of health using a large number of indicators to represent measurable phenomenon. The 41 health indicators are organized in a framework to represent health status, determinants of health, health system performance, and community and health system characteristics. The primary source was the 2003 Canadian Community Health Survey. Indicators are presented graphically to provide the context of time and comparison with Canadian rates. Additional sections provide PEI data by age and sex, and by Regional Health Authority.

Overall, the health of Islanders rates as "good". Our health is similar to Canadians, and shows few differences from one Regional Health Authority to another. Our life expectancy has been increasing. We have successfully maintained a low rate of babies born with low birth weights and a reduction in vaccine preventable diseases.

However, these results have been achieved despite our poor diet and high smoking, drinking, inactivity and obesity rates. Over the next 25 years, PEI's aging population will result in the proportion of seniors doubling, and the proportion of youth under age 20 decreasing by a third. These all point to future increases in health problems associated with chronic diseases.

Note the summary table of indicators on page 44.

SOMMAIRE

Le rapport d'indicateurs de la santé de 2004 (provincial et régional) tente de décrire le sujet complexe qu'est la santé en utilisant un grand nombre d'indicateurs pour représenter des phénomènes mesurables. Les 41 indicateurs de la santé sont organisés de façon à représenter l'état de santé, les déterminants de la santé, le rendement du système de santé, ainsi que les caractéristiques de la collectivité et du système de santé. La principale source fut l'Enquête sur la santé dans les collectivités canadiennes de 2003. Les indicateurs sont présentés à l'aide de graphiques afin d'illustrer les différentes périodes et de faciliter la comparaison avec les taux canadiens. Des sections additionnelles fournissent des données pour l'Î.-P.-É., et ce, par âge, sexe et régie régionale des services de santé.

En général, la santé des Insulaires a été évaluée comme étant « bonne ». Notre santé est semblable à celle des Canadiens et présente peu de différences d'une régie régionale des services de santé à une autre. Notre espérance de vie a augmenté. Nous avons également réussi à maintenir un faible taux de bébés ayant une insuffisance pondérale à la naissance et à réduire le nombre de maladies pouvant être prévenues par un vaccin.

Ces résultats ont été accomplis malgré notre mauvais régime alimentaire et nos taux élevés de tabagisme, de consommation d'alcool, d'inactivité et d'obésité. Au cours des 25 prochaines années, le vieillissement de la population de l'Î.-P.-É. se traduira par un doublement de la proportion de personnes âgées et une réduction d'un tiers de la proportion de jeunes sous l'âge de 20 ans. Tout cela laisse prévoir des augmentations de problèmes de santé associés aux maladies chroniques.

Voir le tableau sommaire des indicateurs à la page 44.

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1 INTRODUCTION

1.1 BACKGROUND

Health is the complete state of physical, mental, social, and emotional well-being and not mere absence of disease[1]. Population health is influenced by various determinants: personal health practices, social, economic and physical environments, human biology, as well as the health system.[2] One method of describing the complexities of health is to use a large number of indicators to represent measurable phenomenon.

Health indicators are:
- relevant to established health goals
- based on standard (comparable) definitions and methods
- broadly available - at the national, provincial, and regional levels

Health indicators can be used to monitor progress in improving and maintaining the health of the population and the functioning of the health system, by providing comparisons over time, and between regions. By keeping in mind that each indicator is only a partial description, we expect the discussion of indicators will lead to a better understanding of health.

1.2 HEALTH INDICATORS FRAMEWORK

Health indicators are organized to represent:
- Health Status
  measures of the overall health of the population
- Non-Medical Determinants of Health
  factors known to affect our health and, in some cases, when and how we use health care
- Health System Performance
  measures of various aspects of the quality of health care; ideally these aspects would include acceptability, accessibility, appropriateness, competence, continuity, effectiveness, efficiency, and safety
- Community and Health System Characteristics
  measures that provide useful contextual information (such as health services received), but are not direct measures of health status or the quality of care

This organizational framework of health indicators was developed by Statistics Canada and the Canadian Institute for Health Information, in collaboration with health administrators, researchers, caregivers, government officials, health advocacy groups, and consumers.

The health indicators framework shown below describes the current indicators within 4 categories and 15 dimensions. The 41 indicators in this report are listed. Other indicators may have been identified as important, but have no data currently available for PEI.

Health Indicators Framework

1. Health Status			
Well-being	Human Function	Deaths	Health Conditions
• self-reported health	• functional health status	• life expectancy • premature death by cause	• low birth weight • obesity • chronic conditions • depression • cancer incidence
2. Non-Medical Determinants of Health			
Health Behaviours	Living and Working Conditions	Personal Resources	Environmental Factors
• smoking • drinking • physical activity • breastfeeding • diet • condom use	• education • unemployment • income • crime	• social support • changes to improve health	• exposure to second-hand smoke • food and waterborne diseases
3. Health System Performance			
Acceptability	Disease Prevention	Effectiveness	Efficiency
• unmet needs • wait times • patient satisfaction	• influenza vaccination • mammography • pap screening • blood pressure	• vaccine preventable diseases • STI's • hospital mortality	• preventable hospitalizations • hospital readmissions
4. Community and Health System Characteristics			
Resources	Health System		Community
• health expenditures	• hospitalization rates by cause • visits to health professionals • home care • social assistance		• population and projections

Source: Stats Can cat. 82-221-XIE, May 2002

2 METHODOLOGY

This report updates the previously released "Prince Edward Island Health Indicators: Provincial and Regional". This report provides comparisons with Canada, comparisons over time, and regional data on a broad range of indicators. It also provides technical details for indicators that are part of the FPT Common Health Indicator reporting.

2.1 SOURCES

The primary source for this report is the Canadian Community Health Survey (CCHS)[3]. This new survey is conducted by Statistics Canada every two years to provide regular and timely cross-sectional estimates of health determinants, health status and health system utilization. There are limitations to the interpretation of survey data, since self-report often provides socially desirable responses. Few of the self-report measures have been validated for their ability to measure the "truth".

The most recent data collection was in 2003. CCHS sampled 134,000 Canadians in 126 health regions, using both computer-assisted personal and telephone interviews. The target population of the CCHS includes household residents, age 12 and over, in all provinces and territories; with the principal exclusion of populations on Indian Reserves, Canadian Forces Bases, some remote areas, and persons living in institutions. In PEI, the sample size was 2,062 Islanders, to provide regional sample sizes of 302 in West Prince, 518 in East Prince, 746 in Queens, 404 in Kings.

The content of the survey includes common content to be asked all across Canada, and optional content that may be selected from a predefined list of modules. The full content is available on the Statistics Canada website[3].

The survey that preceded the CCHS was the National Population Health Survey[4]. It began in 1994/95 as a cross-sectional sample of 30,000 Canadians, including 1,000 Islanders. It has continued as a longitudinal survey that follows the same participants over time.

Other sources utilized for the health indicators include:

- Vital Statistics, Birth and Death databases[5]
- National Diabetes Surveillance System[6]
- Canadian Cancer Registry[7]
- PEI Reproductive Care Program[8]
- Labour Force Survey[9]
- Canadian Centre for Justice Statistics, Uniform Crime Reporting Survey[10]
- Notifiable Diseases Summary[11]
- Health Services Access Survey[12]

- Breast Cancer Screening Programs[13]
- PEI Pap Screening Program[14]
- Hospital Morbidity Database[15]
- National Health Expenditure Database[16]
- PEI Ministry of Health and Social Services Annual Report[17]
- PEI Social Assistance Program
- Demography Statistics[18]

The Appendix provides details on definitions, data tables, and sources for each indicator.

2.2 COMPARISONS

This report presents graphs of the indicators to provide the context of time and comparison with Canadian rates, as found in Chapter 3. Chapter 4 provides PEI data by age and sex, since they have an overwhelming influence on health indicators. Chapter 5 provides data by Regional Health Authority, since they provide the health services. The data tables used to generate the graphs are found in the Appendix.

2.2.1 Confidence Intervals

CCHS uses a complex survey design that is a multistage stratified cluster sample designed for oversampling of sub-populations aged 12 to 19 and 65 and over. Three sample frames are used: the Labour Force Survey sample for in-person visits, household telephone listing, and random digit dialing.

Survey estimates are calculated taking into account sampling weights. These weights are proportional to the inverse probability of being sampled, and adjusted for non-response. Use of the weights provides an unbiased estimate.

The complex survey design of the CCHS also requires taking into account the clustering and stratification of the sample. The design as well as the weighting were incorporated using Statistics Canada's bootstrapping weights. This report used the *svy* commands in Stata (Stata Corporation, College Station, Texas) to provide unbiased estimates and adequately wide confidence intervals that account for the survey design effect[19].

All survey estimates on graphs are surrounded by the 95% confidence interval (CI). This is the computed interval with 95% probability that the true estimate is contained within the upper and lower boundaries. For clarity, the smaller 95%CI for Canada is included in the appendix, but not shown on the graphs. Overlapping confidence intervals (or similar rates) indicate that random variation is the most likely explanation for the possible differences.

For data that is a census instead of a sample (eg. program data, death registrations, cancer registry, and population counts), the estimate provided has no variation to produce a confidence interval. When comparing these rates, random variation does not account for the differences.

2.2.2 Age Standardization

Age standardization is a procedure for adjusting rates, designed to minimize the affects of differences in age composition when comparing rates for different populations. The direct method was used to average age-specific rates, using as weights the distribution of a standard population. The adjusted rate then represents what the observed rate would have been if that population had the same distribution as the standard population. The standard population used was the 1991 Canadian population with the following distribution:

	Population
12-14 years	4844.8
15-19 years	8218.5
20-24 years	9000.9
25-34 years	21878.9
35-44 years	19132.0
45-49 years	7143.5
50-64 years	16080.2
65-69 years	4627.9
70 years and over	9073.3
TOTAL	100,000

Since age has an effect on most measures of health (see Chapter 4), the measures compared in Chapters 3 and 5 should be age standardized. In this document, many indicators in Chapter 3 are adjusted for age, including:

- 1.1 self-reported health
- 1.2 functional health status
- 1.3 life expectancy
- 1.4 premature death by cause
- 1.5 low birth weight
- 1.6 obesity
- 1.7 chronic conditions
- 1.8 depression
- 1.9 cancer incidence
- 2.2 drinking
- 2.3 physical activity
- 2.5 diet
- 2.11 social support
- 3.1 unmet health needs
- 3.10 hospital mortality
- 3.11 preventable hospitalizations
- 3.12 hospital readmissions
- 4.3 visits to health professionals
- 4.4 home care

Chapter 4 provides observed rates by age and sex. The comparison of most indicators must be made with the caveat that the rates are influenced by the age distributions of the populations, as well as other influences such as socio-economic status, or the availability of services. No indicators in Chapter 5 are age standardized. For example, when examining the rates of education across health regions, we should take into account the decrease in education with age. Health regions with an older population can expect slightly lower rates of education compared to PEI.

2.2.3 Other Data Sources

Comparisons with other data sources may result in different numbers for similar concepts, usually as a result of differences in methodology. To minimize problems, comparisons should use the same data source, and look for trends over time. Sometimes several documents using the same data sources will report different numbers. This may be the result of reporting on more current data, the use of different age groups, or the use of sub-samples of the dataset.

3 PROVINCIAL INDICATORS

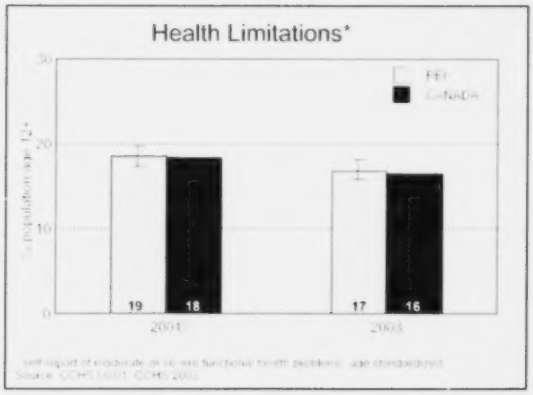
3.1 HEALTH STATUS

3. 1.1 Self-reported Health

Self-reported health summarizes physical and mental health as experienced by the individual according to personal values. Self-reported health deteriorates with age and low income[20]. PEI and Canada have similar rates that have remained stable, with over 60% describing their health as "excellent" or "very good". These rates are similar to Islanders description of their oral health.

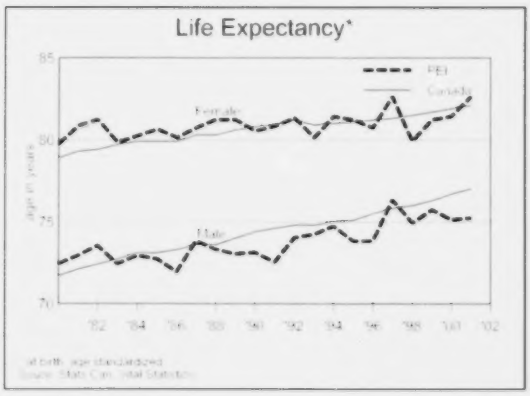
3. 1.2 Functional Health Status

Not everyone is in perfect health. As the population ages, more people are experiencing moderate or severe limitations due to health problems. PEI and Canada have similar rates that are stable.



3. 1.3 Life Expectancy

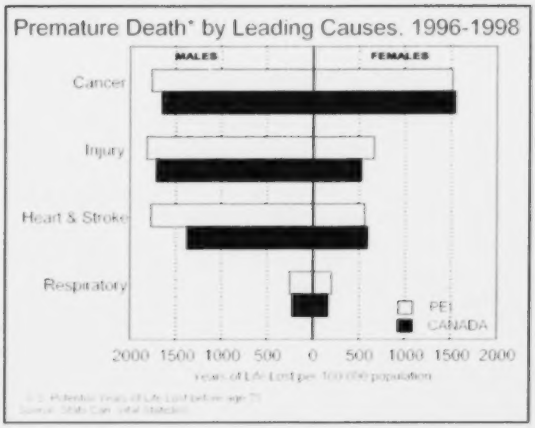
Death is the oldest, most widely used, and most reliable health indicator. Life expectancy measures the quantity rather than the quality of life. PEI and Canada have similar life expectancy, that are increasing, with males born in 2001 expected to live to age 76, and women to age 82.



3.1 HEALTH STATUS

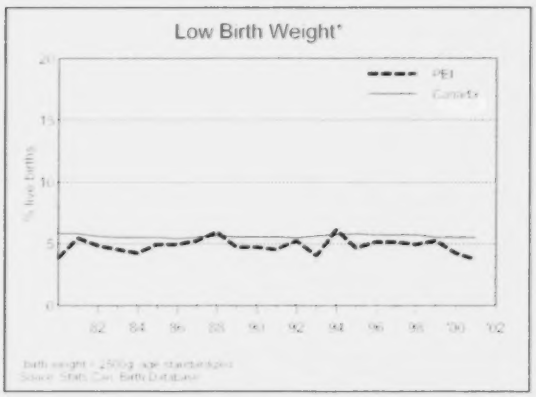
3. 1.4 Premature Death by Cause

Cancers are the leading cause of premature death, followed by injury, circulatory disease, and respiratory disease. (Circulatory disease is the leading cause of death at any age). PEI deaths due to smoking-related cancers continue to increase[21].



3. 1.5 Low Birth Weight

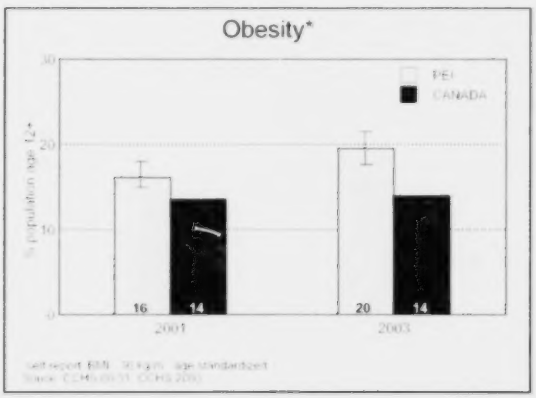
Low birth weight is a key determinant of infant survival, health, and development. Underweight births can result in problems such as cerebral palsy, visual problems, learning disabilities and respiratory problems. Low birth weights are due to premature birth, lack of prenatal nourishment, maternal hypertension, or maternal smoking[20]. PEI's low birth weight rate is stable around 5%, consistently one of the lowest rates in Canada.



3. 1.6 Obesity

Body weight depends on a combination of factors, including genetics, diet, and active living. Obesity[22] is linked to cardiovascular disease, diabetes, and some cancers. Overweight persons are more likely to be male, older, and have less education[20].

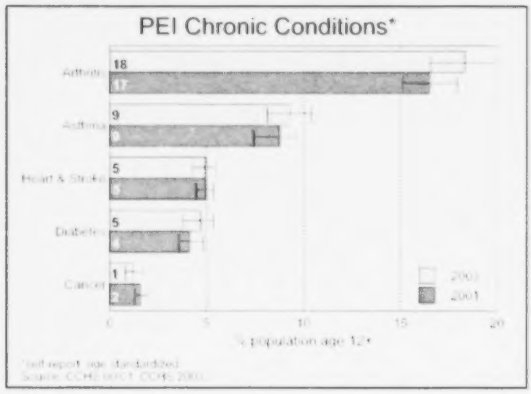
PEI's obesity rate appears to be increasing. This is a public health concern, especially since self report may under-estimate obesity by half[23].



3.1 HEALTH STATUS

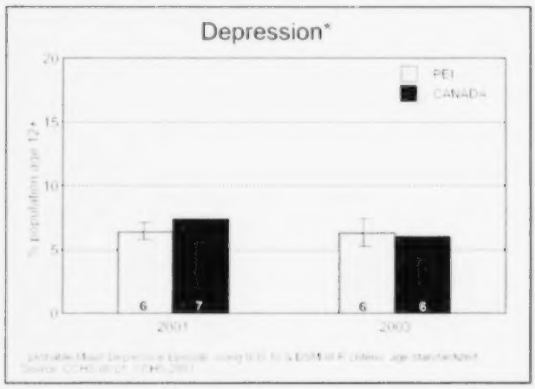
3. 1.7 Chronic Conditions

Chronic conditions are major causes of death, potential years of life lost, hospitalization, and affect quality of life. As the population ages, the prevalence of chronic conditions is increasing. PEI rates are similar to Canadian rates.



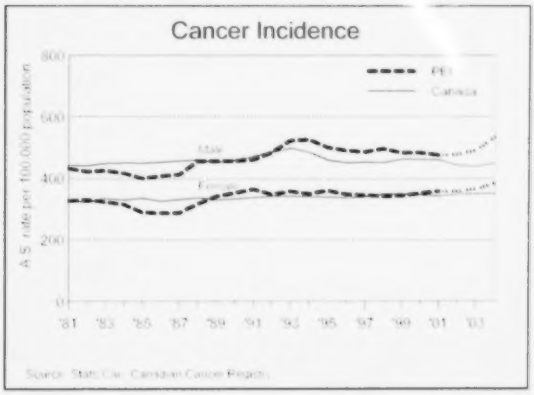
3. 1.8 Depression

Depression causes substantial suffering and is associated with higher hospital use and physician visits. Depression increases with low income[20]. PEI and Canada have similar rates that are stable.



3. 1.9 Cancer Incidence

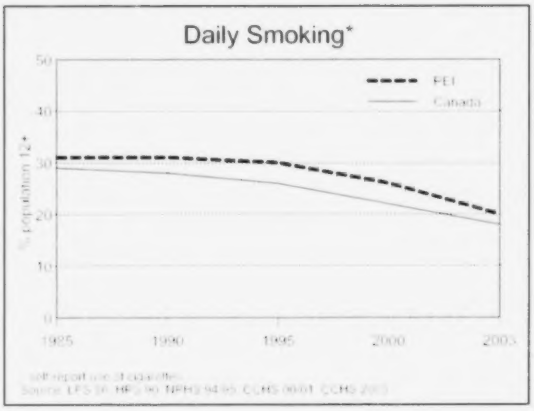
New cases of cancer are monitored to indicate changes in the risk of developing cancer. The most common cancer sites with new cases are prostate, breast, lung, and colorectal. PEI and Canadian rates are similar, and have remained stable. However, the total number of new cases continues to increase as the population increases and ages[24].



3.2 NON-MEDICAL DETERMINANTS OF HEALTH

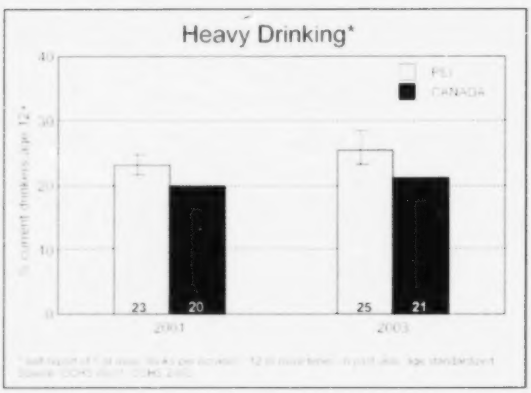
3. 2.1 Smoking

Smoking is the most important preventable cause of death. Health effects include low birth weight, sudden infant death syndrome, asthma, bronchitis, emphysema, lung cancer, stroke, and heart disease. Despite this, PEI smoking rates are consistently higher than Canadian rates. The trend for both PEI and Canada is toward decreasing rates.



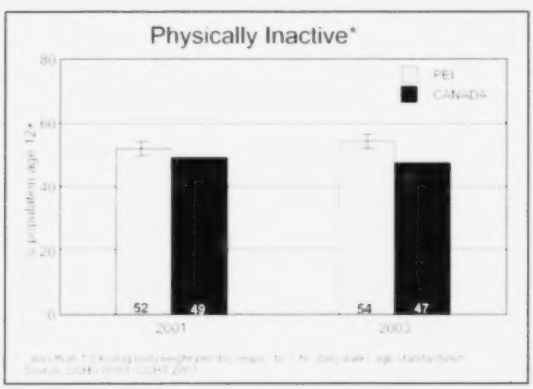
3. 2.2 Drinking

Excessive use of alcohol can lead to health and social problems. Men are more likely than women to report heavy drinking on a regular basis. Heavy drinking is most common among youth (under 25), and decreases with education[20]. PEI's heavy drinking rate is consistently higher than the Canadian rate.



3. 2.3 Physical Activity

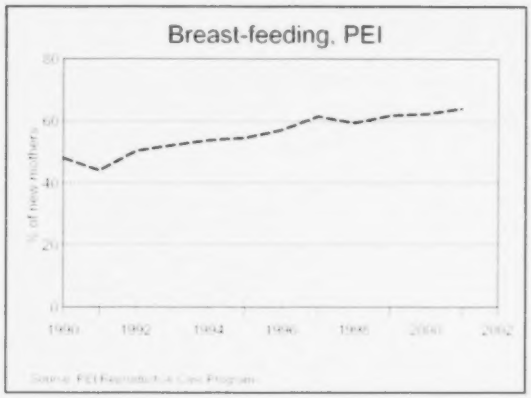
Physical activity reduces the risk of heart disease, diabetes, cancer, osteoporosis, obesity and excess stress. Activity levels increase with education and income and decrease with age[20]. Over 50% of Islanders are inactive. PEI's activity rates are consistently lower than the Canadian rate.



3.2 NON-MEDICAL DETERMINANTS OF HEALTH

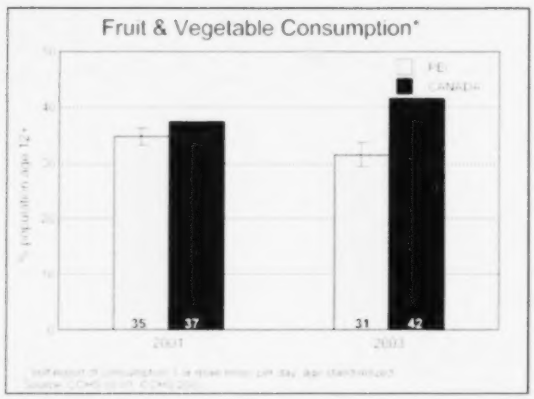
3. 2.4 Breast-feeding

Breast milk is recommended as the only source of nutrients for most infants in the first 3-6 months of life. Breast feeding is most common among mothers over 25, and mothers with higher education[20]. PEI rates are increasing. Comparison with Canada using available self-report data indicates that PEI rates are about 10% lower than Canadian rates[25].



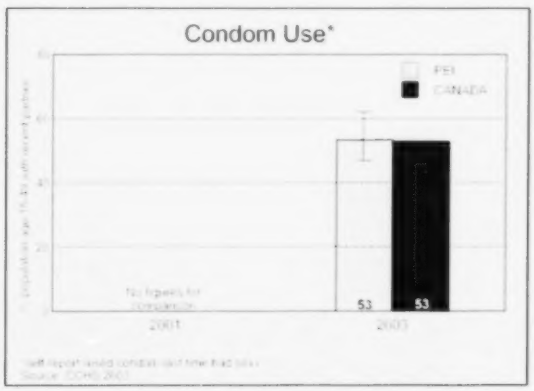
3. 2.5 Diet

Fruits and vegetables are a daily part of a balanced diet[26]. However, only ⅓ of Islanders report consumption of the minimal requirements. PEI rates of consumption have remained stable, in spite of increasing Canadian rates.



3. 2.6 Condom Use

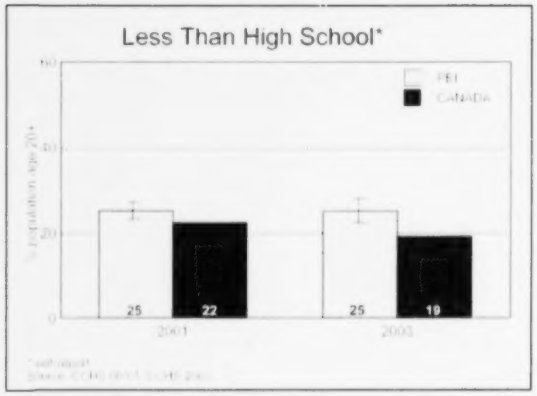
Condoms provide protection against sexually transmitted diseases. PEI and Canada have similar rates, with only half of those sexually active with a recent partner reporting they use a condom.



3.2 NON-MEDICAL DETERMINANTS OF HEALTH

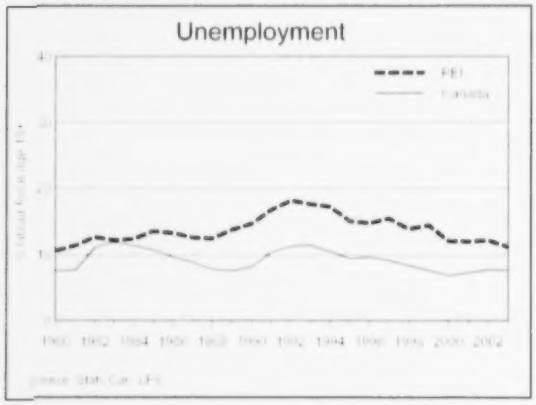
3. 2.7 Education

Literacy and numeracy skills are essential for full participation in today's society. People lacking such skills may end up feeling alienated from society and may suffer from various physical and mental health problems. The level of education decreases with age[20]. PEI's education levels remained stable, while they are improving in Canada.



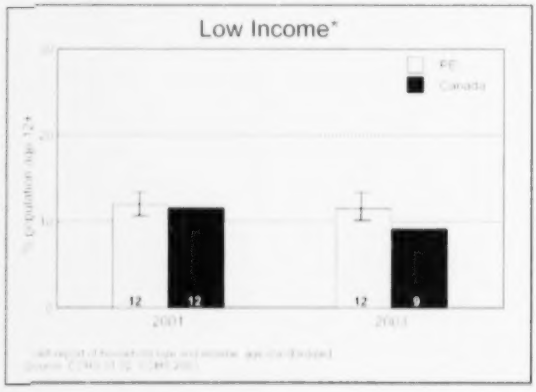
3. 2.8 Unemployment

Employment is a measure of the health of a nation's economy. Unemployed people tend to experience more health problems than those who are employed[20]. Between 1992 and 2003, PEI's unemployment rate decreased from 18% to 11%. PEI's unemployment rate is consistently higher than the Canadian rate.



3. 2.9 Income

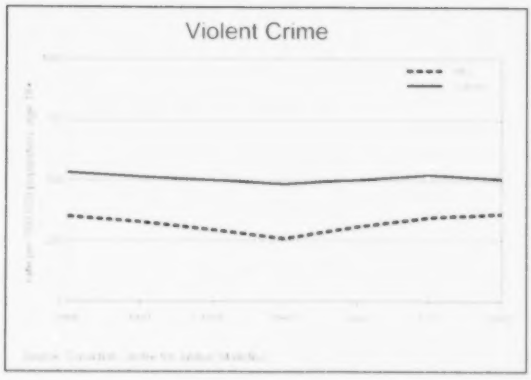
Higher income is associated with better health. Low income Canadians are more likely to die earlier and to suffer more illness than those with higher incomes, regardless of age, sex, race and place of residence[20]. PEI's income is consistently lower than Canadian income.



3.2 NON-MEDICAL DETERMINANTS OF HEALTH

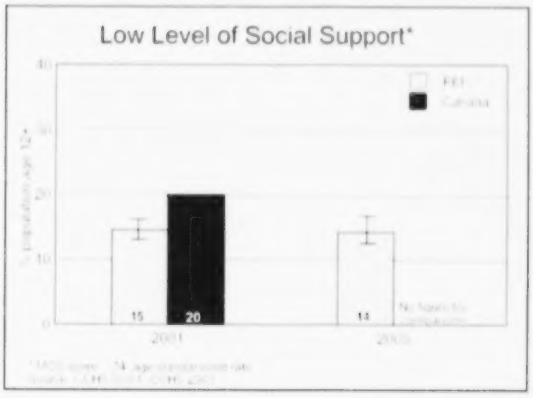
3. 2.10 Crime

Crime rates are one measure of safety. PEI's crime rates are consistently below the Canadian rates.



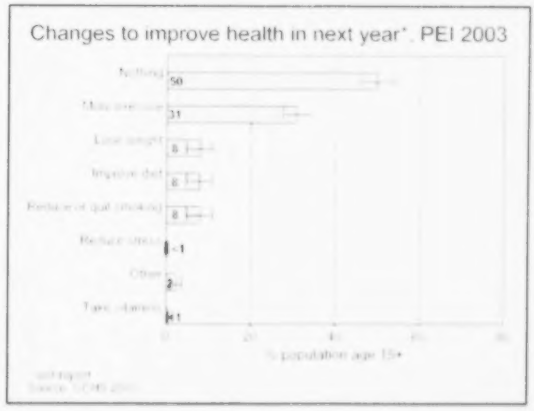
3. 2.11 Social Support

Social support is an important coping mechanism for individuals when problems arise. Low levels of social support can contribute to depression, suicide, a range of physical conditions and even early death[27]. PEI levels of social support have remained stable.



3. 2.12 Changes to Improve Health

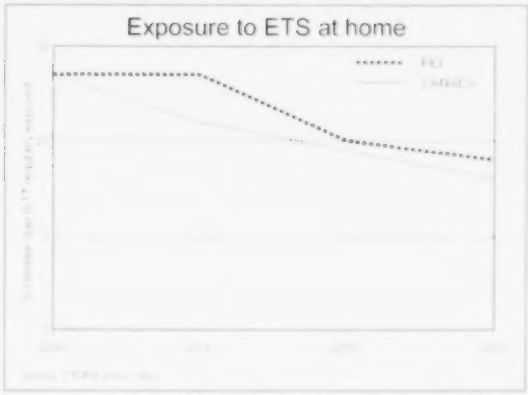
Intentions to change indicate the readiness to potentially change behaviour. The majority of Islanders are not ready to change, similar to rates in 1990 and 2001[25]. When Islanders consider improving their health, they are most aware of the need to increase exercise, lose weight, improve their diet, and quit smoking.



3.2 NON-MEDICAL DETERMINANTS OF HEALTH

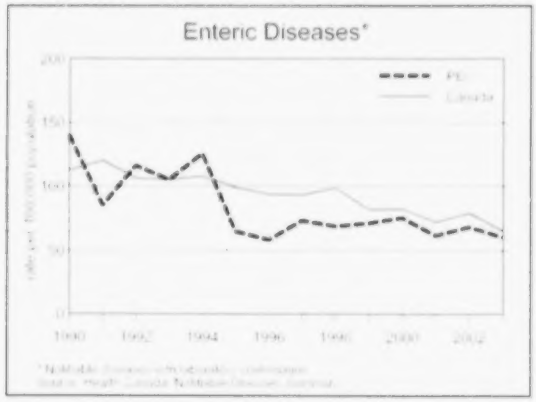
3. 2.13 Exposure to Second-hand Smoke

Exposure to environmental tobacco smoke (ETS) causes lung cancer, heart disease, and respiratory problems. Young children are particularly susceptible. One of the most effective ways to limit exposure to ETS is with restrictions on smoking in public places, and limiting smoking in homes with young children[20]. Exposure rates are decreasing in both PEI and Canada.



3. 2.14 Food and Waterborne Diseases

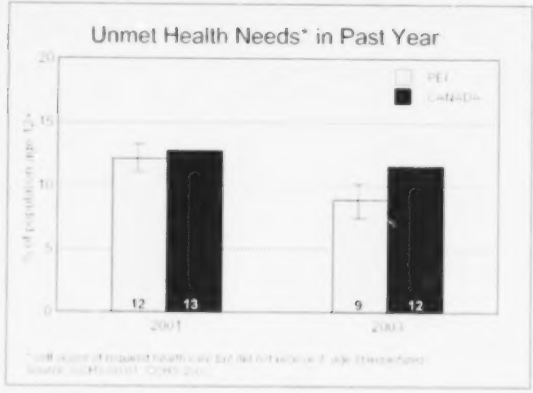
Contaminated food, beverages, or water cause enteric diseases that result in diarrhea, vomiting, stomach cramps, kidney failure, or death. Illness can be reduced by good hygiene, correct food storage, and thorough cooking. As few as 1-10% of cases are reported, since only some patients seek medical care or have specimens taken for laboratory tests[28]. PEI and Canada have similar rates that are decreasing.



3.3 HEALTH SYSTEM PERFORMANCE

3. 3.1 Unmet Health Needs

"Universality" means that all citizens will have access to the care they need within a reasonable period of time. However, about 10% of the population in PEI and Canada perceive that access to care is not met. The major reason given was waiting time.

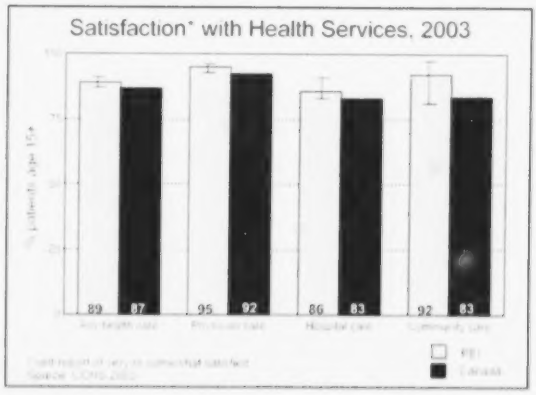


3. 3.2 Wait Time

Wait time is one measure of access to services. In Canada and PEI, people are waiting 3 to 4 weeks for specialist visits or for non-emergency surgery.

3. 3.3 Patient Satisfaction

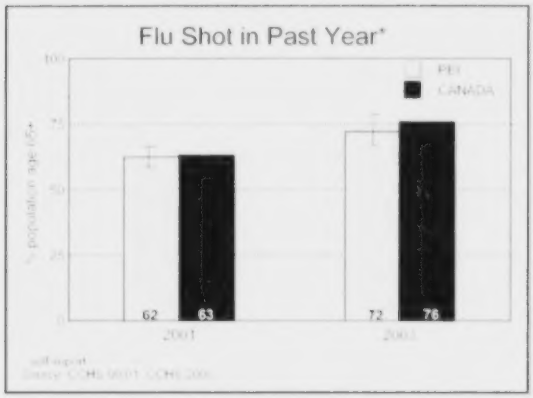
Patient satisfaction combines quality of care, outcome of care, convenience and availability, continuity, interpersonal aspects, finances, and facilities[29]. Satisfaction is influenced by past experiences, knowledge of alternatives, and levels of expectation[30]. The majority of patients (~90%) are satisfied with the services provided.



3.3 HEALTH SYSTEM PERFORMANCE

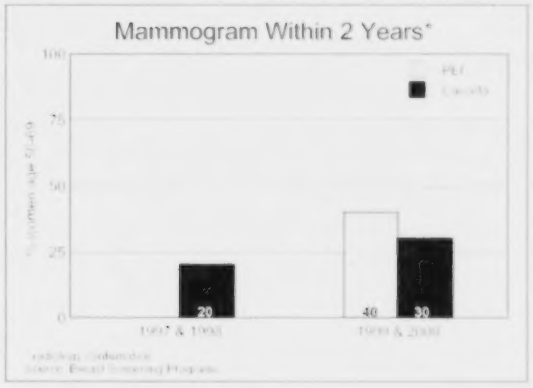
3. 3.4 Influenza Vaccination

Immunization is recommended annually for seniors and immuno-compromised persons, to lessen the severity of influenza[31]. For people over 65, PEI and Canada have similar rates that are increasing.



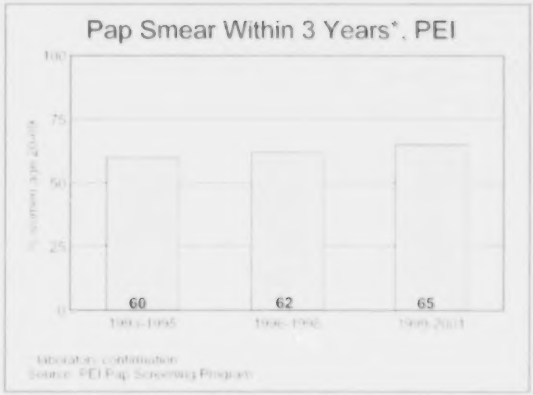
3. 3.5 Mammography

Mammograms are recommended every 2 years for women aged 50 to 69, for early detection of breast cancer[31]. To encourage this, the PEI Breast Screening Program began in 1998. In spite of the proven effectiveness of screening, less than half of women in PEI and Canada are screened.



3. 3.6 Pap Screening

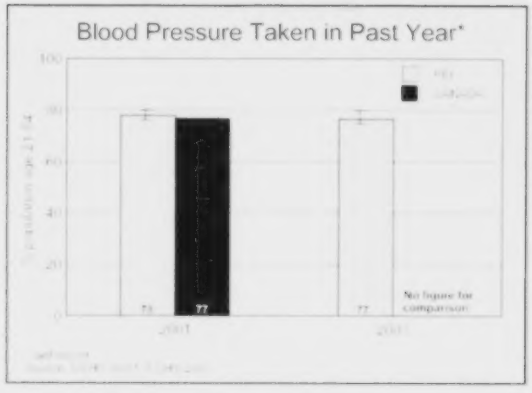
Pap smears are recommended every 3 years for women aged 18 to 69, to prevent cervical cancer[31]. To encourage this, the PEI Pap Screening Program began in 2001. PEI rates are similar to Canadian rates[25] (using self-report data), and have remained stable.



3.3 HEALTH SYSTEM PERFORMANCE

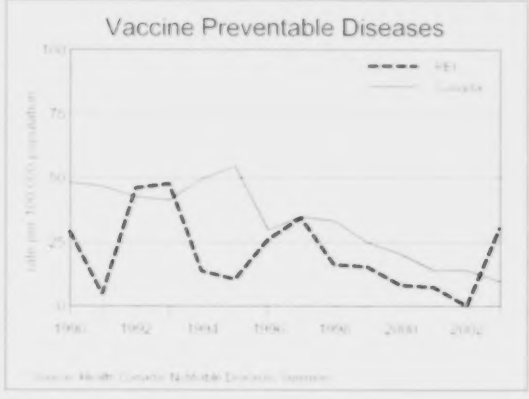
3. 3.7 Blood Pressure

Measurement of blood pressure during a medical visit is recommended for persons aged 21 to 84, to detect hypertension[31]. PEI and Canadian rates are similar, and are stable.



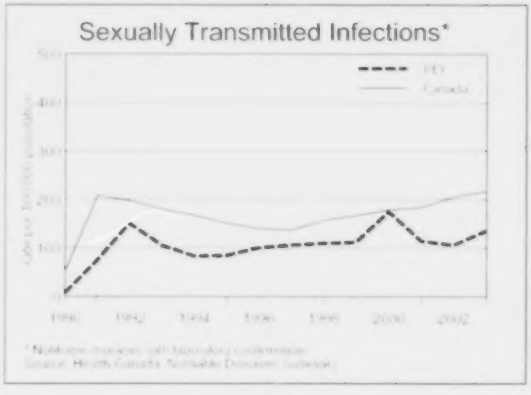
3. 3.8 Vaccine Preventable Diseases

Many childhood and adult diseases are prevented by vaccination. These include pertussis, hepatitis B, rubella, mumps, measles, diphtheria, tetanus, *Haemophilus influenza* type b, and polio. PEI and Canadian rates are decreasing, although they fluctuate with pertussis outbreaks.



3. 3.9 Sexually Transmitted Infections

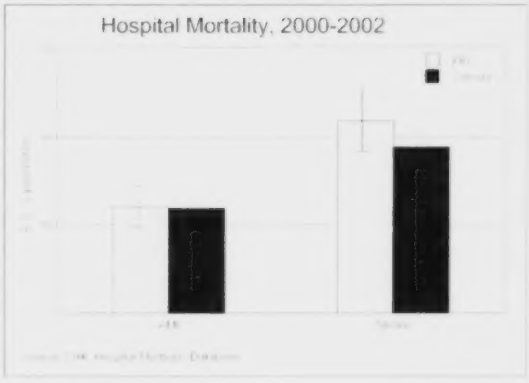
Unprotected sexual activity can spread infection with STIs. Chlamydia (the most common STI) and gonorrhea can result in infertility in both sexes. Syphilis can damage the brain. AIDS can result in death. PEI and Canadian rates are increasing.



3.3 HEALTH SYSTEM PERFORMANCE

3. 3.10 Hospital Mortality

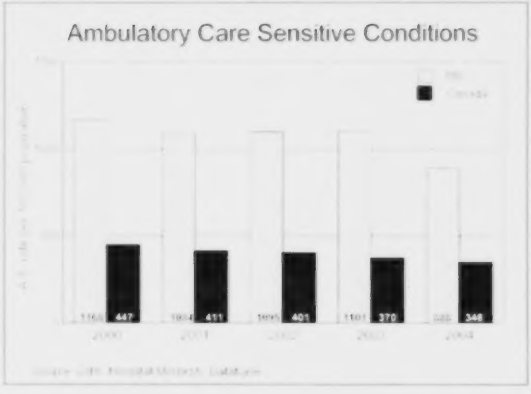
With current in-hospital treatments, deaths following a heart attack or stroke should be minimized. PEI and Canadian mortality rates are similar, indicating a standard quality of care.



3. 3.11 Preventable Hospitalizations

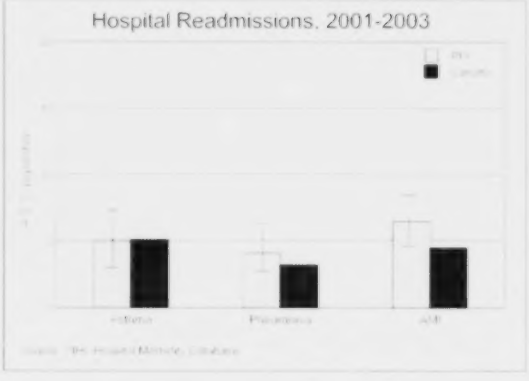
Some hospital admissions could be prevented with the appropriate out-patient treatment. PEI consistently hospitalizes over twice the Canadian rate for these conditions. This may be related to the limited availability of community care[32].

These conditions contribute to PEI's consistently high rate of hospitalization, compared to Canada.



3. 3.12 Hospital Readmissions

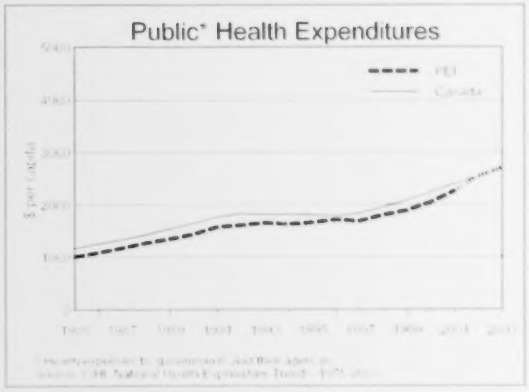
Some hospital admissions could be prevented with appropriate hospital care and out-patient care following conditions such as asthma, pneumonia or heart attacks. PEI and Canadian rates are similar, indicating a standard quality of care that uses hospital resources efficiently.



3.4 COMMUNITY AND HEALTH SYSTEM CHARACTERISTICS

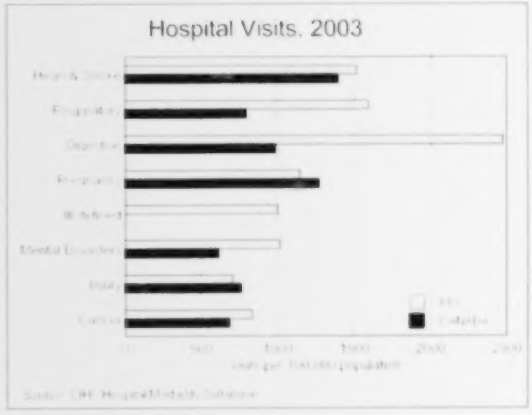
3. 4.1 Health Expenditures

Increases in health expenditures are a result of a combination of population growth, increased utilization per capita, and increased prices. PEI consistently spends less (~ $150 per capita) than the Canadian average. However, PEI spends more of its resources on health (8% GDP) compared to the Canadian average (6% GDP)[33].



3. 4.2 Hospitalization Rates by Cause

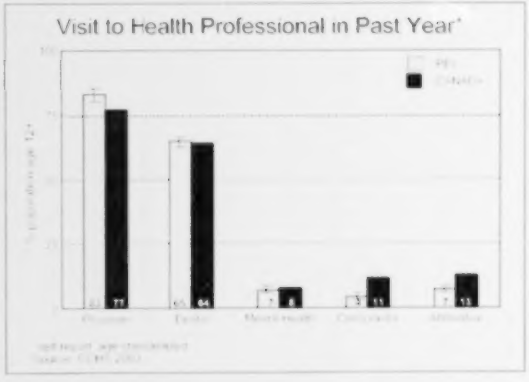
The leading causes of hospitalizations are digestive, respiratory, and circulatory conditions. In both PEI and Canada, the largest decreases since 1998 are for pregnancy and respiratory hospitalizations (see Appendix). PEI hospitalization rates are much higher than the Canadian rates for digestive, respiratory, ill-defined, and mental disorders.



3. 4.3 Visits to Health Professionals

Access to physicians has remained stable. Physician visits[20] and dental visits[34] increase with income. Of those visiting a physician, 40% had a physicial check-up.

Access to physicians, mental health, dentists is similar in PEI and Canada. PEI rates are lower than Canadian rates for chiropractors and alternative care (eg. massage, homeopathy, acupuncture).

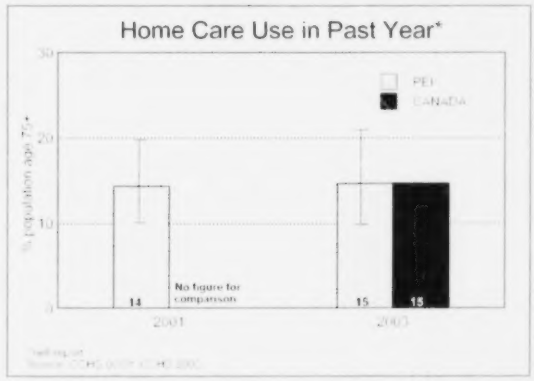


3.4 COMMUNITY AND HEALTH SYSTEM CHARACTERISTICS

3. 4.4 Home Care

Home care services are designed to maintain independence and reduce the need for hospitalization and long-term care. The rate of use is similar in PEI and other parts of Canada, and has remained stable (~15% of persons 75+).

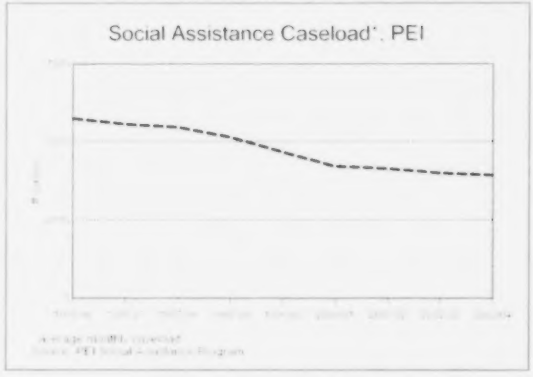
However, the potential need for home care may increase, since half of those needing assistance with personal care received no formal home care. In many cases that help is provided informally by family and friends[35].



3. 4.5 Social Assistance

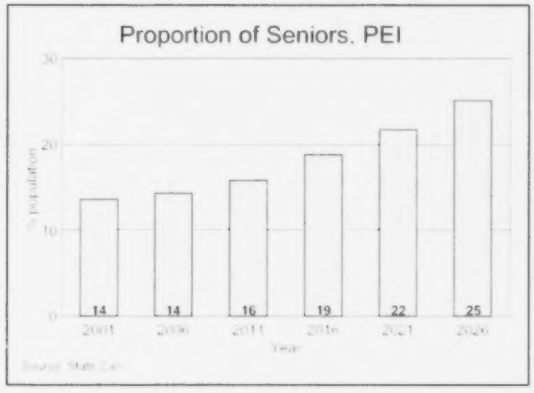
Social assistance is designed to provide income for families in financial need. The number of cases in PEI has decreased over the period 1995 to 2003.

Caseloads have a seasonal pattern with lowest rates in the summer and early fall, and highest rates in late winter and early spring.



3. 4.6 Population and Projections

The aging population is illustrated by the increasing proportion of seniors in the PEI and Canadian populations. The PEI proportion over age 65 is consistently higher than the Canadian proportion.

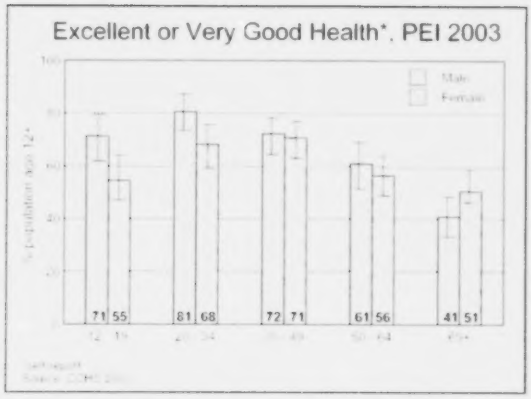


4 INDICATORS BY AGE AND SEX

4.1 HEALTH STATUS

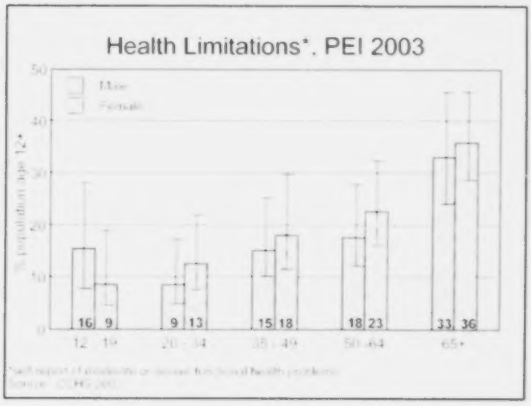
4. 1.1 Self-reported Health

Self-reported health decreases with age, and is similar for males and females.



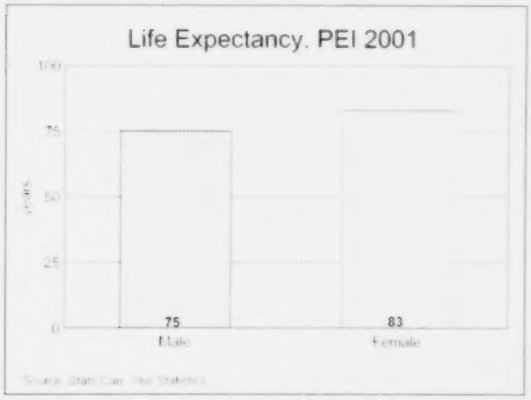
4. 1.2 Functional Health Status

Health limitations increase with age, and are similar for males and females.



4. 1.3 Life Expectancy

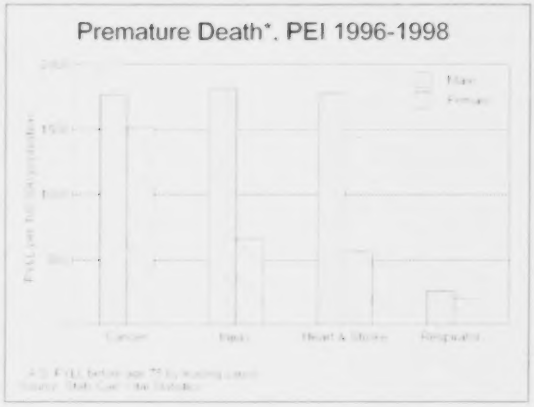
In PEI, females lived 8 years longer, on average, than males.



4.1 HEALTH STATUS

4. 1.4 Premature Death by Cause

Premature deaths were higher for males than females for all the leading causes. The leading cause of premature death for persons 20 to 34 is injury; for persons 35 to 64 is cancer; for persons 65 to 74 is both cancer and heart/stroke. The leading cause of death for persons 75 and over (not included in premature deaths) is heart/stroke.

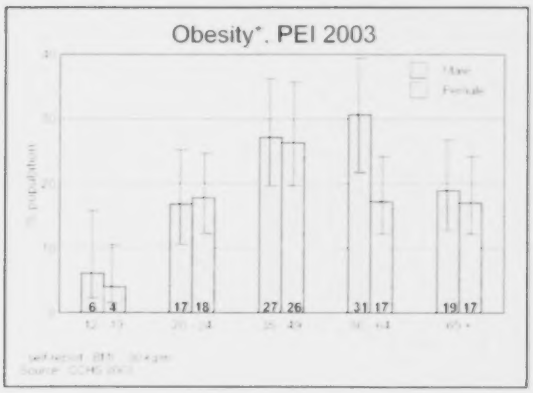


4. 1.5 Low Birth Weight

In Canada, low birth weights are more common among mothers under 15 and over 45[20].

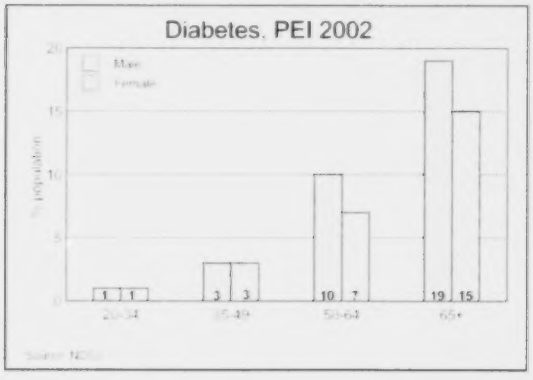
4. 1.6 Obesity

Obesity rates tend to increase with age, peaking before age 65. The male obesity rate is higher than the female rate.



4. 1.7 Chronic Conditions

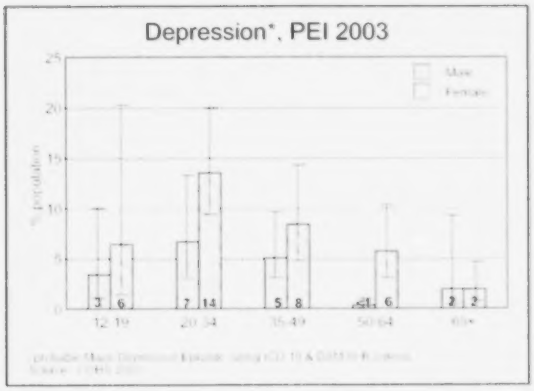
Diabetes prevalence increases with age. This is similar to the pattern seen with other chronic conditions such as arthritis, cardiovascular disease, and cancer[20].



4.1 HEALTH STATUS

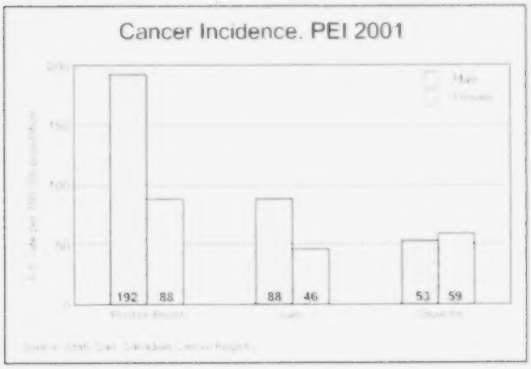
4. 1.8 Depression

Depression is most common in mid-life. The female rate of depression is higher than the male rate.



4. 1.9 Cancer Incidence

Cancer increases with age, and is more common for males than females[21, 24].

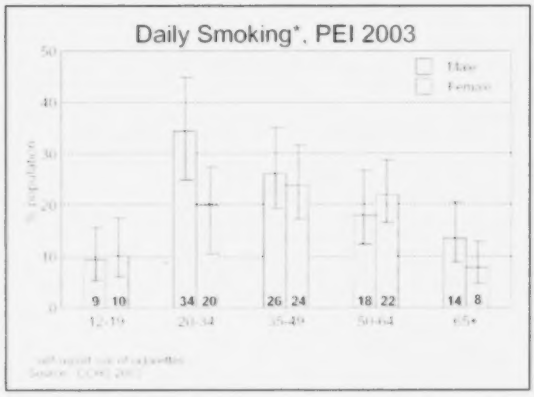


4.2 NON-MEDICAL DETERMINANTS OF HEALTH

4. 2.1 Smoking

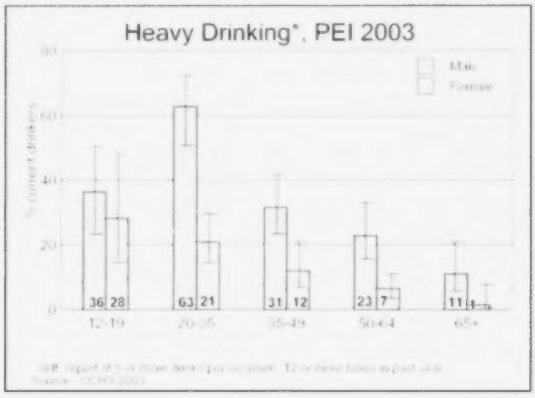
Smoking rates peak with young adults, and are higher for males than females.

In PEI, teen smoking rates are similar for males and females (similar results with a larger sample of teenagers in 2002[36]). This is counter to the Canadian trend of higher female teenage smoking rates.



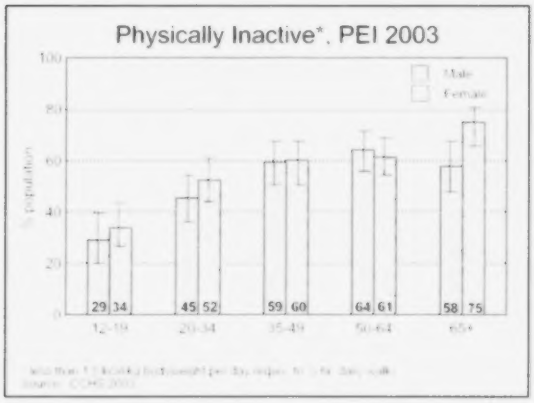
4. 2.2 Drinking

Heavy drinking rates decrease with age, and are higher for males than females.



4. 2.3 Physical Activity

Activity levels decrease with age. Females are less active than males especially among the youngest and oldest age groups.



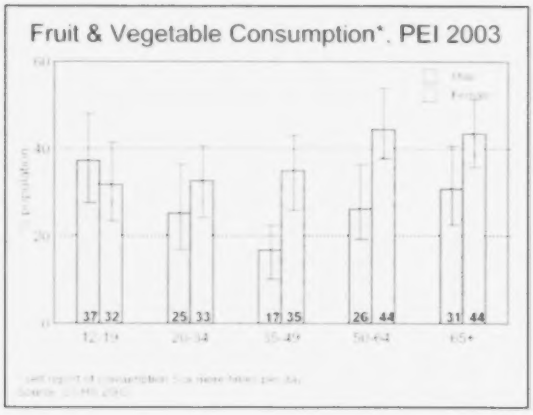
4.2 NON-MEDICAL DETERMINANTS OF HEALTH

4. 2.4 Breast-feeding

In Canada, breast-feeding is most common among mothers over 25[20].

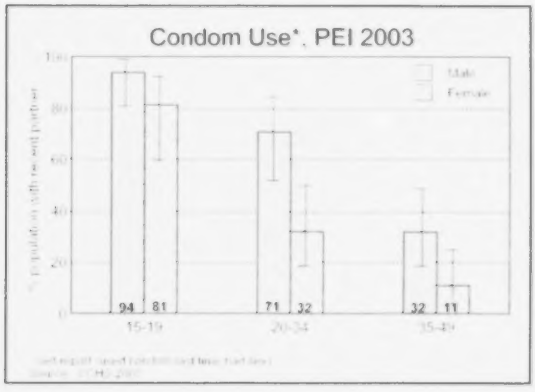
4. 2.5 Diet

Fruit and vegetable consumption is low for all Islanders. Women over 50 reported the highest consumption of fruits and vegetables.



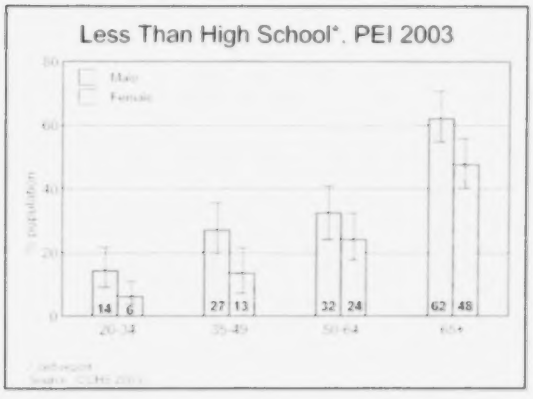
4. 2.6 Condom Use

Condom use decreases with age.



4. 2.7 Education

Education level decreases with age, for both males and females.



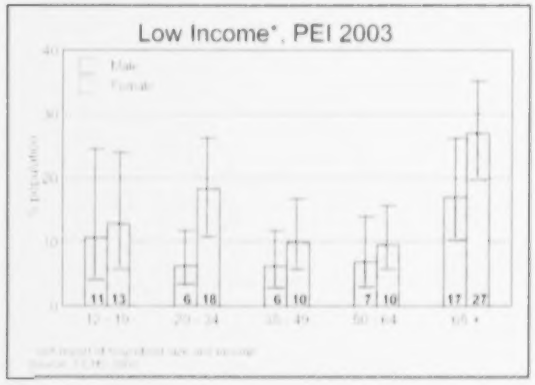
4.2 NON-MEDICAL DETERMINANTS OF HEALTH

4. 2.8 Unemployment

In Canada, unemployment rates are higher for youth than adults[9].

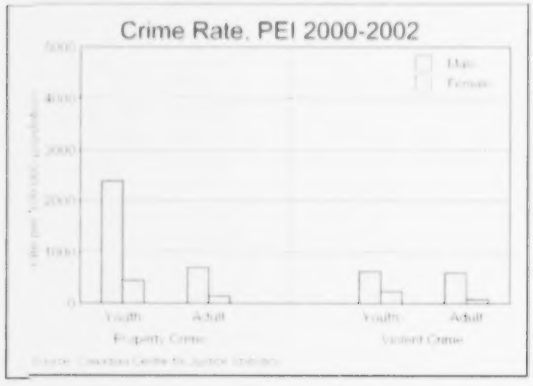
4. 2.9 Income

Seniors have the highest rates of inadequate income.



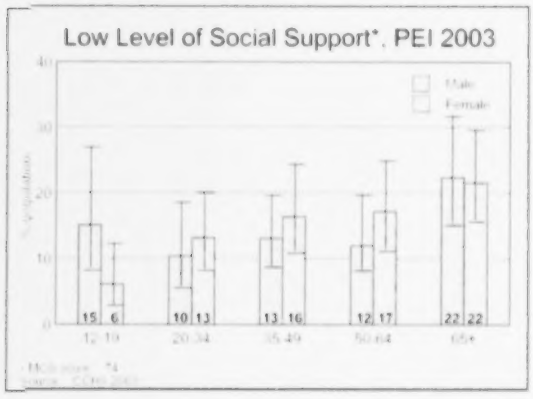
4. 2.10 Crime

Young males are most likely to be charged with property crimes. Adult females are least likely to be charged with violent crime.



4. 2.11 Social Support

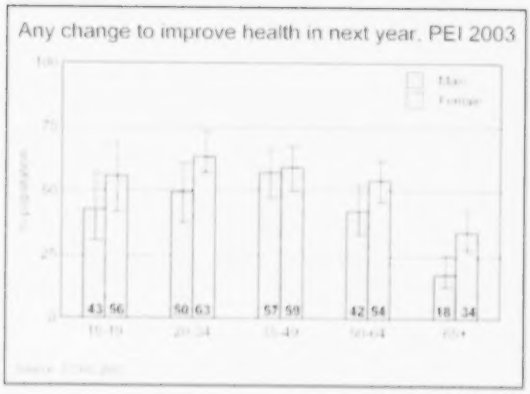
Social support levels are similar for both sexes. There are no significant differences by age. However, the trend may indicate higher levels of social support among seniors.



4.2 NON-MEDICAL DETERMINANTS OF HEALTH

4. 2.12 Changes to Improve Health

Islanders' readiness to make changes to improve health decreases with age. Senior males are the least likely to make changes.



4. 2.13 Exposure to Second-hand Smoke

Exposure to ETS is not available by age and sex.

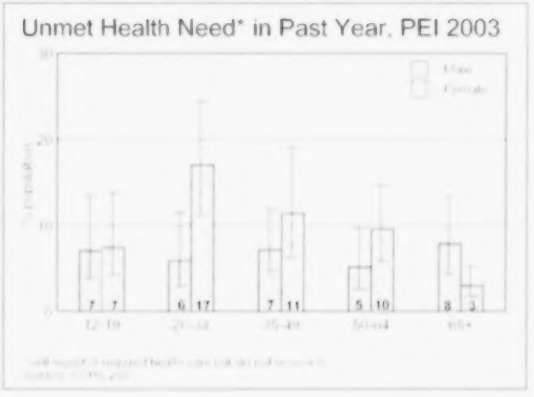
4. 2.14 Foodborne and Waterborne Diseases

Not available by age and sex.

4.3 HEALTH SYSTEM PERFORMANCE

4. 3.1 Unmet Health Needs

Female rates of unmet health needs are higher than male rates. There are no significant differences by age. However, the trend may indicate a peak in mid-life.

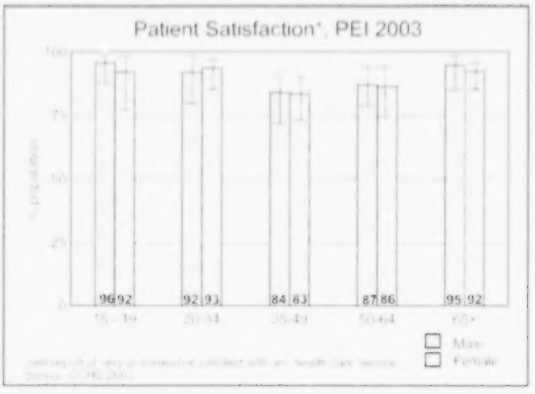


4. 3.2 Wait Time

Not available by age and sex.

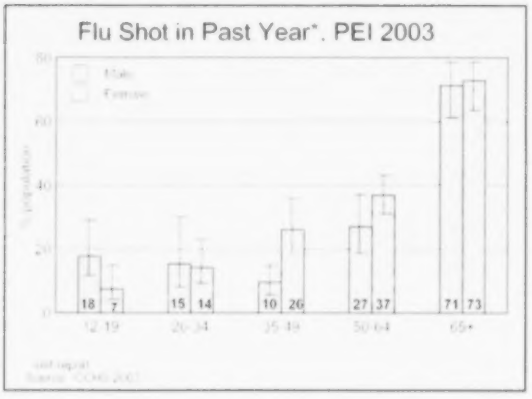
4. 3.3 Patient Satisfaction

Patient satisfaction was similar for all age groups and both sexes.



4. 3.4 Influenza Vaccination

Most flu shots are provided to seniors age 65 and over, consistent with vaccination recommendations for seniors. Male and female rates of vaccination are similar.



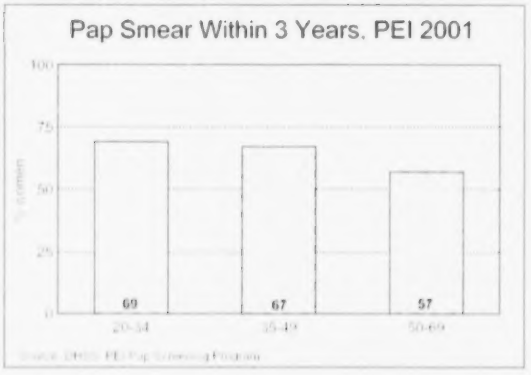
4. 3.5 Mammography

Only reported for women age 50 to 69, to correspond with screening recommendations.

4.3 HEALTH SYSTEM PERFORMANCE

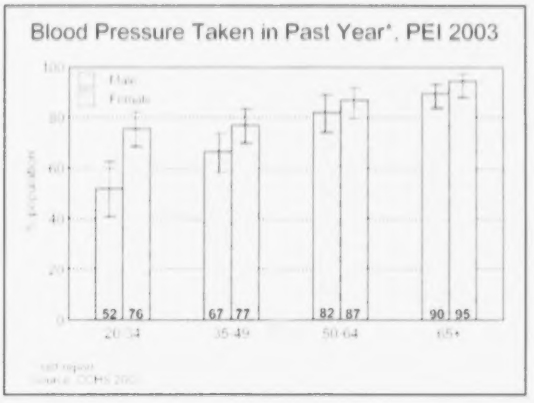
4. 3.6 Pap Screening

Pap screening decreases with age, despite screening recommendations for all women age 20 to 69.



4. 3.7 Blood Pressure

As people age, they are more likely to have their blood pressure taken. More women than men had their blood pressure taken.



4. 3.8 Vaccine Preventable Diseases

Not available by age and sex.

4. 3.9 Sexually Transmitted Infections

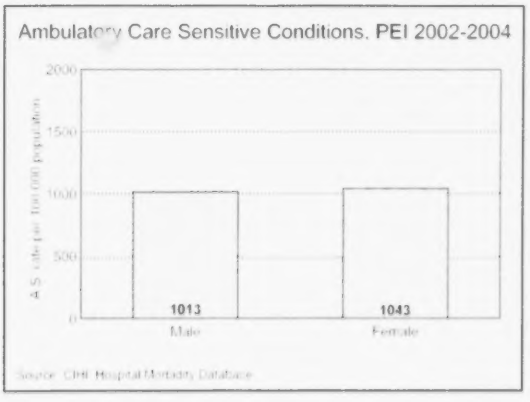
Not available by age and sex.

4. 3.10 Hospital Mortality

Not available by age and sex.

4. 3.11 Preventable Hospitalizations

In PEI, more female than male hospital admissions could be prevented with appropriate out-patient treatment.



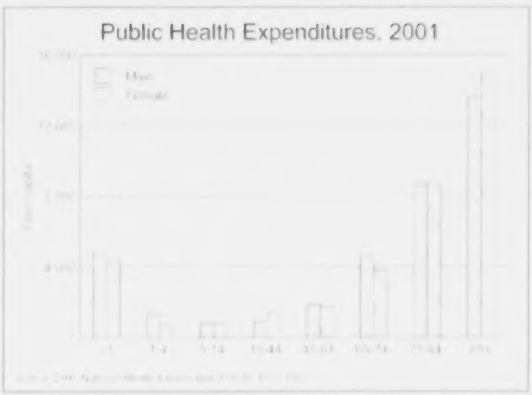
4. 3.12 Hospital Readmissions

Not available by age and sex.

4.4 COMMUNITY AND HEALTH SYSTEM CHARACTERISTICS

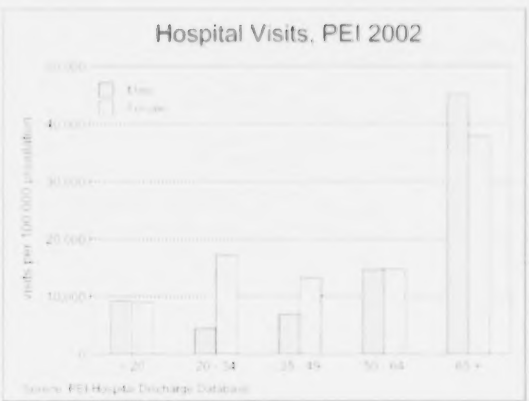
4. 4.1 Health Expenditures

Health expenditures increase with age, with a similar pattern for both sexes.



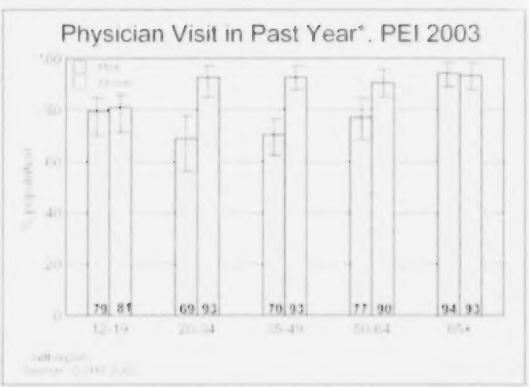
4. 4.2 Hospitalization Rates by Cause

For PEI males, the leading causes of hospitalization were digestive, respiratory, and heart/stroke conditions. For PEI females, they were digestive, pregnancy, and heart and stroke.



4. 4.3 Visits to Health Professionals

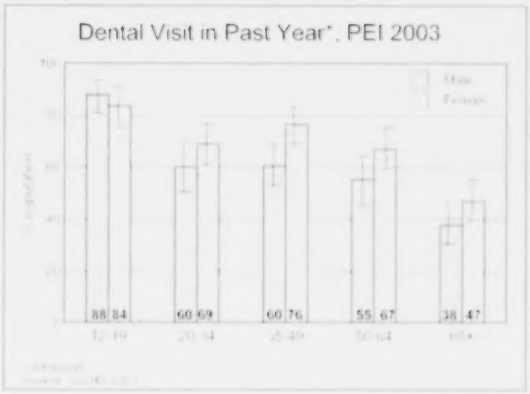
Physician visits increase with age for men. Physician visits are higher for women than men.



4.4 COMMUNITY AND HEALTH SYSTEM CHARACTERISTICS

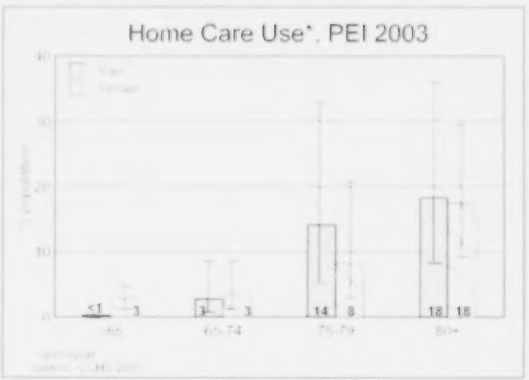
4. 4.3 Visits to Health Professionals

In PEI, dental visits are highest in childhood, corresponding to the PEI Dental Health Program. In Canada, dental visits show a similar pattern of decline with age, but a lower rate of 69% in childhood[34]. Reasons for not seeking care in the past three years include not necessary (31%), have dentures (27%), not gotten around to it (10%), pain or embarrassment (5%). Cost was an issue for 26% of persons without dental insurance.



4. 4.4 Home Care

Although less than 1% of Islanders under age 65 use home care services, they represent one-quarter of home care recipients. Home care use increases with age.



4. 4.5 Social Assistance

Not available by age and sex.

4. 4.6 Population and Projections

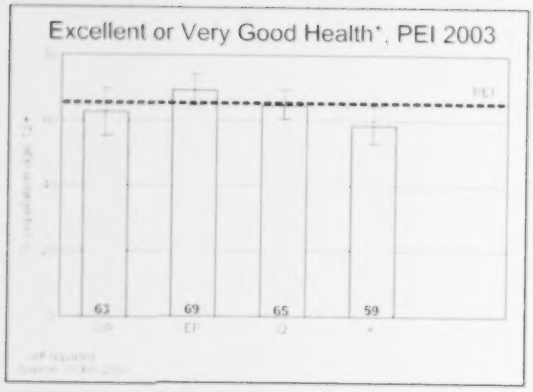
There is little gender variation by age in the population. While there are more women than men over 65 as a result of women's longer life expectancy, there are virtually equal numbers in all younger age groups. Over the next 25 years, PEI's aging population will result in the proportion of seniors doubling, and the proportion of youth under age 20 decreasing by a third.

5 INDICATORS BY HEALTH REGION

5.1 HEALTH STATUS

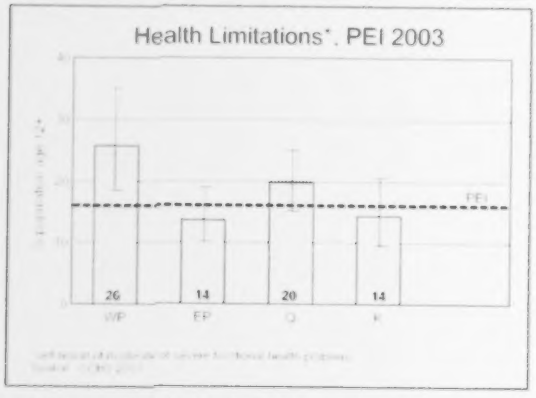
5. 1.1 Self-reported Health

There are no significant differences by health region.



5. 1.2 Functional Health Status

There are no significant differences by health region.

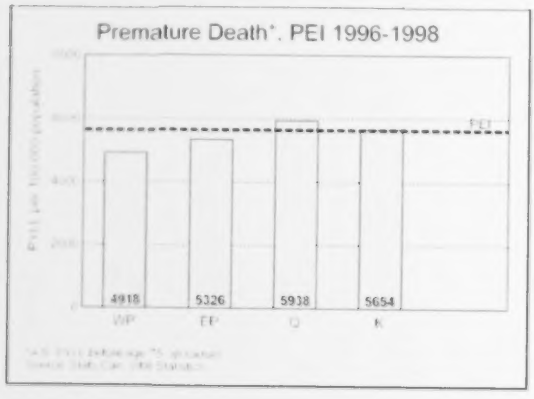


5. 1.3 Life Expectancy

Not available by health region.

5. 1.4 Premature Death by Cause

Premature deaths are lowest in West Prince.



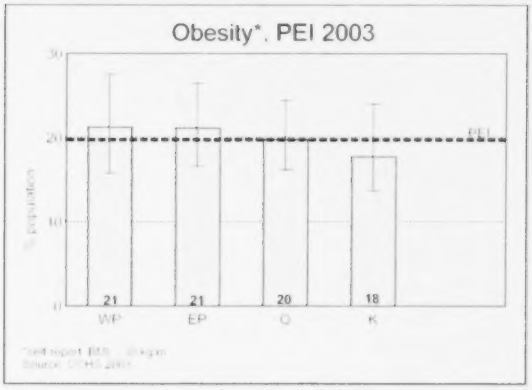
5.1 HEALTH STATUS

5. 1.5 Low Birth Weight

Not available by health region.

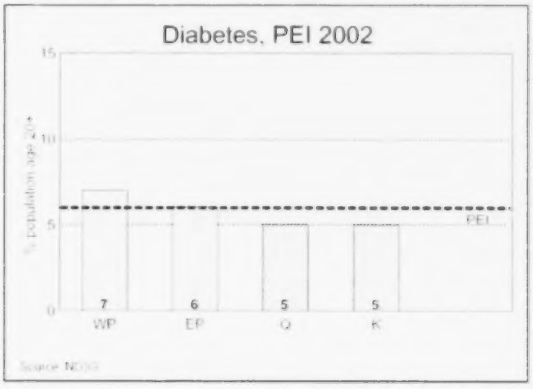
5. 1.6 Obesity

There are no significant differences by health region.



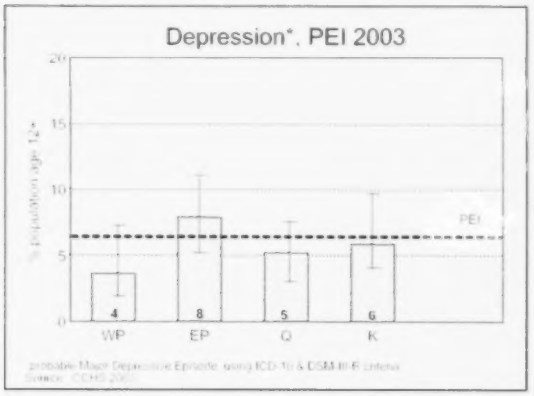
5. 1.7 Chronic Conditions

Diabetes prevalence in West Prince is higher than the provincial rate.



5. 1.8 Depression

There are no significant differences by health region.



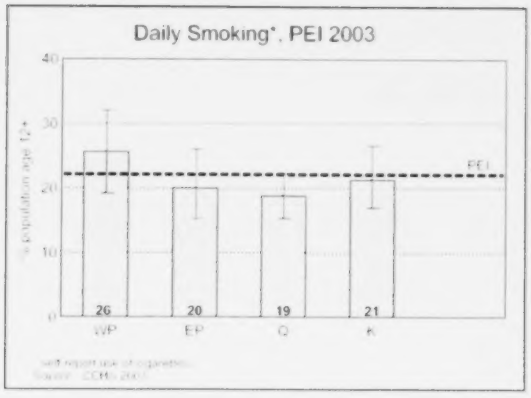
5. 1.9 Cancer Incidence

Not available by health region.

5.2 NON-MEDICAL DETERMINANTS OF HEALTH

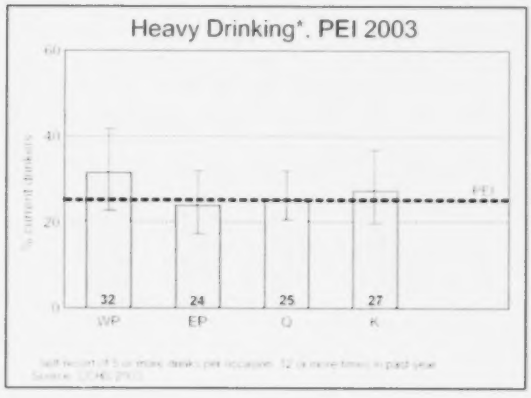
5. 2.1 Smoking

There are no significant differences by health region.



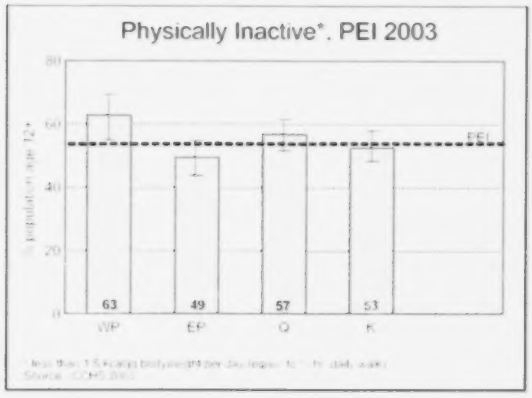
5. 2.2 Drinking

There are no significant differences by health region.



5. 2.3 Physical Activity

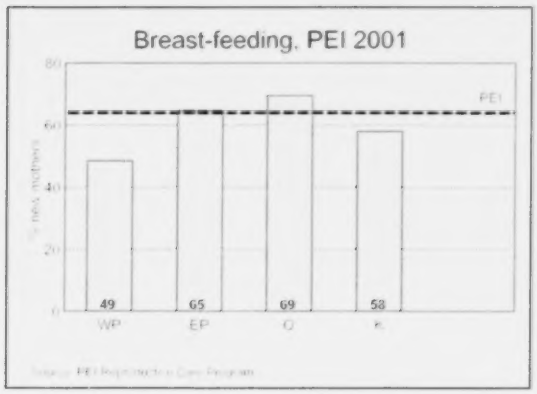
There are no significant differences by health region.



5.2 NON-MEDICAL DETERMINANTS OF HEALTH

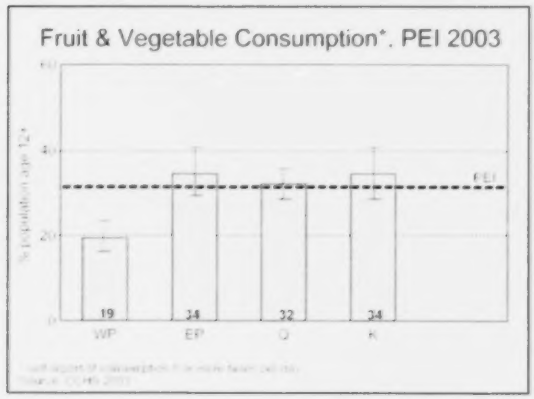
5. 2.4 Breast-feeding

Breast-feeding rates are lowest in West Prince.



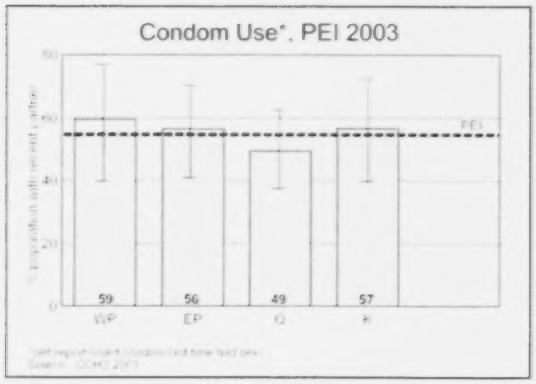
5. 2.5 Diet

Fruit and vegetable consumption is lowest in West Prince.



5. 2.6 Condom Use

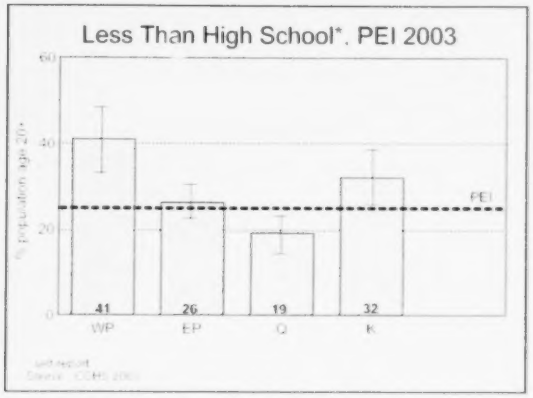
There are no significant differences by health region.



5.2 NON-MEDICAL DETERMINANTS OF HEALTH

5. 2.7 Education

Education levels are the highest in Queen's, and the lowest in West Prince.

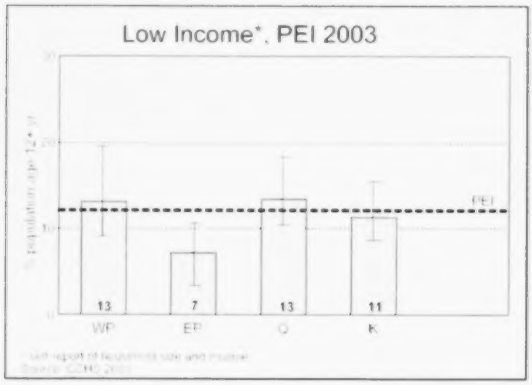


5. 2.8 Unemployment

Not available by health region.

5. 2.9 Income

There are no significant differences by health region.



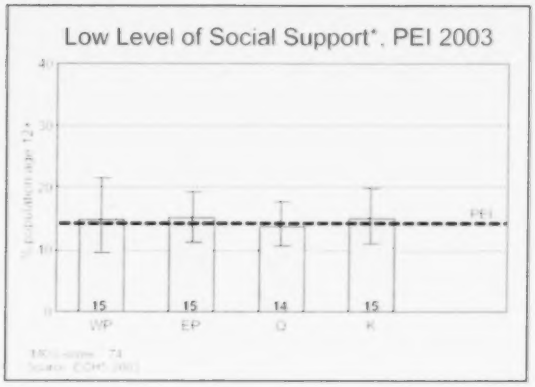
5. 2.10 Crime

Not available by health region.

5.2 NON-MEDICAL DETERMINANTS OF HEALTH

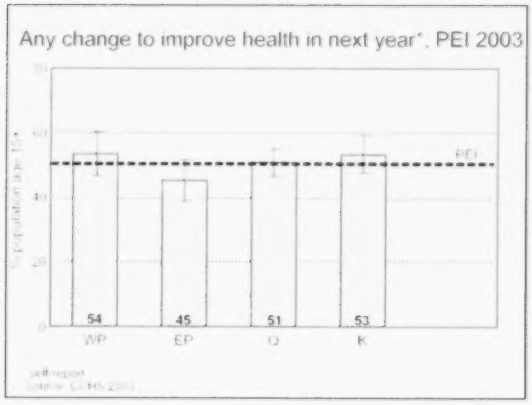
5. 2.11 Social Support

There are no significant differences by health region.



5. 2.12 Changes to Improve Health

There are no significant differences by health region.



5. 2.13 Exposure to Second-hand Smoke

Not available by health region.

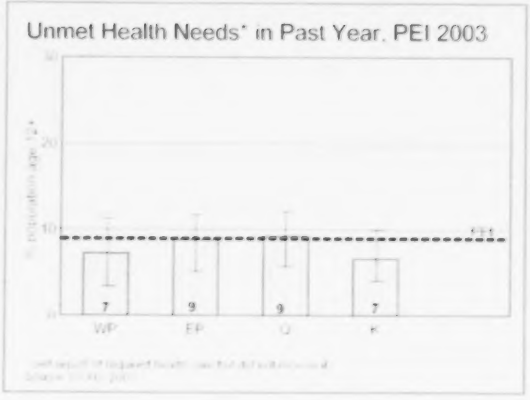
5. 2.14 Foodborne and Waterborne Diseases

Not available by health region.

5.3 HEALTH SYSTEM PERFORMANCE

5. 3.1 Unmet Health Needs

There are no significant differences by health region.

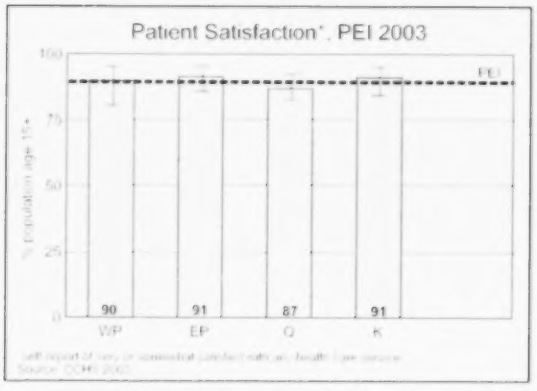


5. 3.2 Wait Time

Not available by health region.

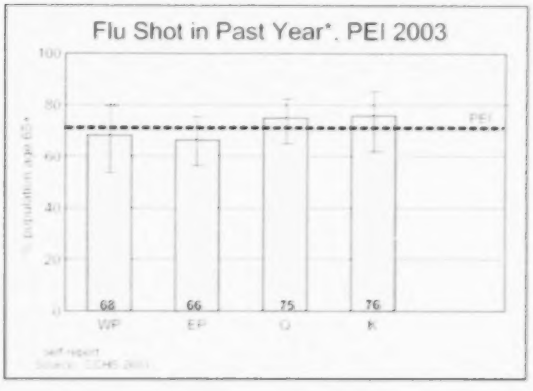
5. 3.3 Patient Satisfaction

There are no significant differences by health region.



5. 3.4 Influenza Vaccination

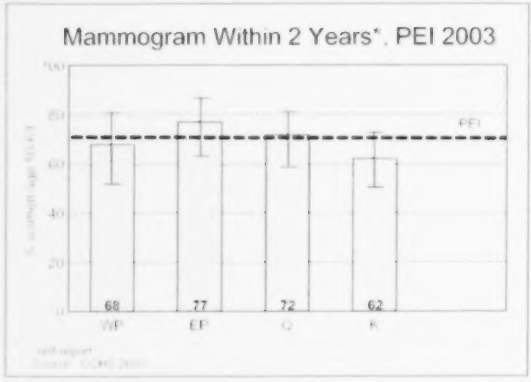
There are no significant differences by health region.



5.3 HEALTH SYSTEM PERFORMANCE

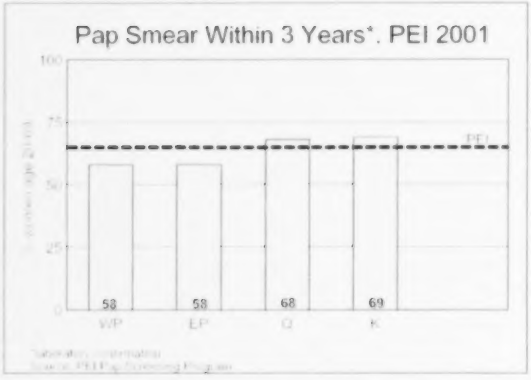
5. 3.5 Mammography

There are no significant differences by health region.



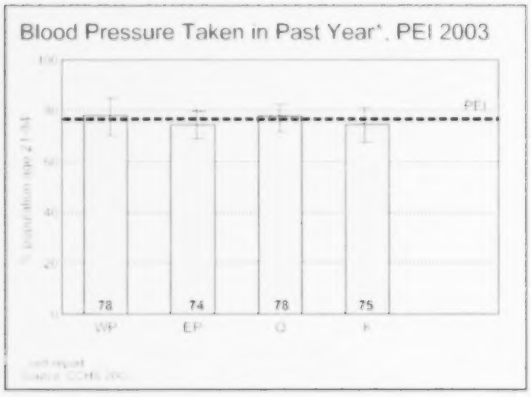
5. 3.6 Pap Tests

Pap screening rates in West Prince and East Prince are lower than the provincial screening rate.



5. 3.7 Blood Pressure

There are no significant differences by health region.



5. 3.8 Vaccine Preventable Diseases Not available by health region.
5. 3.9 Sexually Transmitted Infections Not available by health region.
5. 3.10 Hospital Mortality Not available by health region.
5. 3.11 Preventable Hospitalizations Not available by health region.
5. 3.12 Hospital Readmissions Not available by health region.

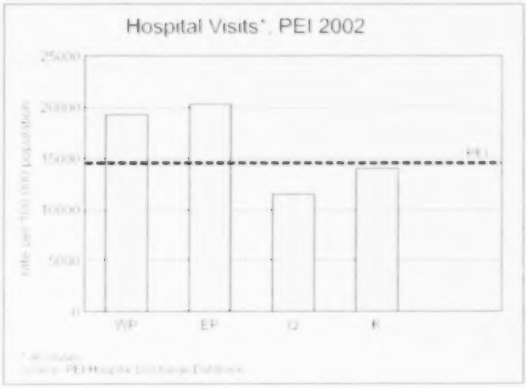
5.4 COMMUNITY AND HEALTH SYSTEM CHARACTERISTICS

5. 4.1 Health Expenditures

Not available by health region.

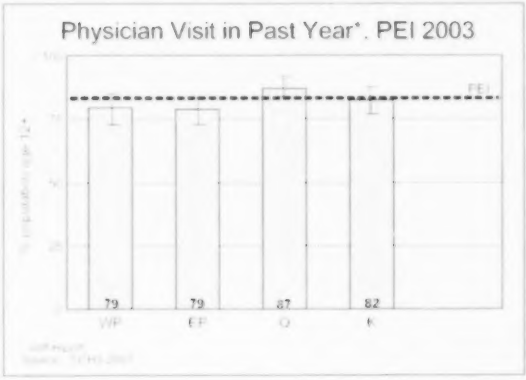
5. 4.2 Hospitalization Rates

Hospitalization rates are highest in West Prince and East Prince, and lowest in Queens.



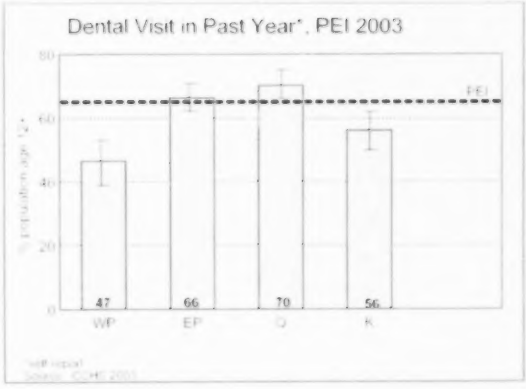
5. 4.3 Visits to Health Professionals

There are no significant differences by health region for physician visits, mental health visits, and visits to chiropractor or alternatives.



5. 4.3 Visits to Health Professionals

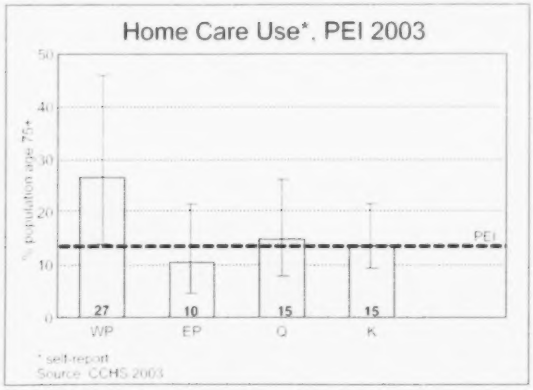
Dental visits are lowest West Prince and Kings.



5.4 COMMUNITY AND HEALTH SYSTEM CHARACTERISTICS

5. 4.4 Home Care

The highest rates of use of home care services for seniors over the age of 75 are in West Prince and Queens, and the lowest in East Prince.



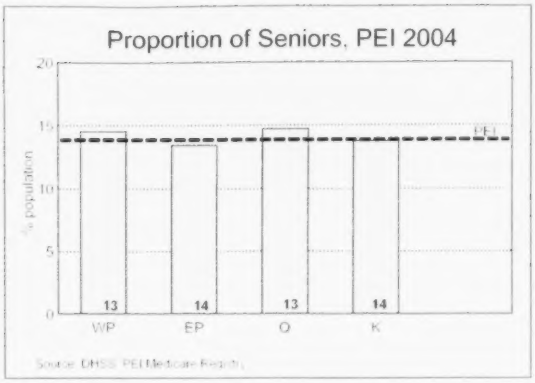
5. 4.5 Social Assistance

Not available by health region.

5. 4.6 Population and Projections

Seniors make up a larger proportion of the population in East Prince and Kings than in West Prince and Queens.

Counts for 2004 are found in the appendix. Projections are not available by health region.



6 HOW HEALTHY ARE ISLANDERS?

6.1 AREAS WITH GOOD RESULTS

The majority of Islanders describe their health as excellent or very good. Our life expectancy has been increasing, and we live in an area with a low crime rate. We are satisfied with our health services. Our most noteworthy public health successes are the low rate of babies born with low birth weights and the reduction in vaccine preventable diseases.

6.2 AREAS FOR IMPROVEMENT

Islanders smoke and drink more than other Canadians, while we are less active, eat fewer fruits and vegetables, and have increasing obesity rates. We live in an area with lower education and income, and higher unemployment than other Canadians. We are hospitalized more than other Canadians, although some hospitalizations could be prevented with increased access to more community services. Appropriate disease prevention activities such as pap screening and flu vaccination for seniors are under-utilized.

6.3 AREAS OF SIMILARITY

Islanders health is generally similar to Canadians. We have similar causes of death, and similar rates of chronic conditions, depression, cancer, and functional health status. Our behaviours are similar in breast-feeding, condom use, and intentions to improve our health. We share similar environments with respect to social support, exposure to second-hand smoke and food and waterborne diseases. Islanders and Canadians share similar rates of mammography, blood pressure testing, and sexually transmitted infections. Health expenditures are increasing across Canada, while access to health professionals and home care remains stable. Hospital effectiveness and efficiency as measured in this report are similar in PEI and Canada.

The populations of both PEI and Canada are aging. Over the next 25 years, PEI's aging population will result in the proportion of seniors doubling, and the proportion of youth under age 20 decreasing by a third. This points toward future increases in chronic diseases and their associated health limitations.

While Canada provides the most convenient comparison for Islanders, this may not represent the most appropriate criterion for Islanders to measure themselves against. For example, the prevalence of chronic diseases are increasing in both Canada and PEI.

6.4 SUMMARY

Health of Prince Edward Islanders, 2001

1. Health Status			
Well-being	Human Function	Deaths	Health Conditions
• **self-reported health**	• functional health status	• **life expectancy** • premature death by cause	• **low birth weight** • obesity • chronic conditions • depression • cancer incidence
2. Non-Medical Determinants of Health			
Health Behaviours	Living and Working Conditions	Personal Resources	Environmental Factors
• smoking • drinking • physical activity • breastfeeding • diet • condom use	• education • unemployment • income • **crime**	• social support • changes to improve health	• exposure to second-hand smoke • food and waterborne diseases
3. Health System Performance			
Acceptability	Disease Prevention	Effectiveness	Efficiency
• unmet needs • wait time • **patient satisfaction**	• influenza vaccination • mammography • pap screening • blood pressure	• **vaccine preventable diseases** • STI's • hospital mortality	• preventable hospitalizations • hospital readmissions
4. Community and Health System Characteristics			
Resources	Health System		Community
• health expenditures	• hospitalization rates by cause • visits to health professionals • home care • social assistance		• population and projections

areas with good results
areas for improvement
areas of similarity with Canada

Overall, the health of Islanders rates as "good" on a scale from poor to excellent.

6.4 SUMMARY

Health of Prince Edward Islanders, 2001

1. Health Status			
Well-being	Human Function	Deaths	Health Conditions
• **self-reported health**	• functional health status	• **life expectancy** • premature death by cause	• **low birth weight** • obesity • chronic conditions • depression • cancer incidence
2. Non-Medical Determinants of Health			
Health Behaviours	Living and Working Conditions	Personal Resources	Environmental Factors
• smoking • drinking • physical activity • breastfeeding • diet • condom use	• education • unemployment • income • **crime**	• social support • changes to improve health	• exposure to second-hand smoke • food and waterborne diseases
3. Health System Performance			
Acceptability	Disease Prevention	Effectiveness	Efficiency
• unmet needs • wait time • **patient satisfaction**	• influenza vaccination • mammography • pap screening • blood pressure	• **vaccine preventable diseases** • STI's • hospital mortality	• preventable hospitalizations • hospital readmissions
4. Community and Health System Characteristics			
Resources	Health System		Community
• health expenditures	• hospitalization rates by cause • visits to health professionals • home care • social assistance		• population and projections

areas with good results
areas for improvement
areas of similarity with Canada

Overall, the health of Islanders rates as "good" on a scale from poor to excellent.

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APPENDIX

1. HEALTH STATUS

1.1 Self-reported Health

Definition: Individuals rate their own health status as being either excellent, very good, good, fair or poor. Overall measure of well-being that incorporates disease severity, coping skills, psychological attitude and social well-being. The rate is age-standardized to the 1991 Canadian population.

Self-perceived health of teeth and mouth is rated as excellent, very good, good, fair or poor. Functional ability to chew is an indicator of oral physical functioning and the extent they are compromised by oral disorders and conditions. The rate is age-standardized to the 1991 Canadian population.

Sources: Statistics Canada: CCHS 2003, CCHS 2000/01[3]

Data Tables:

Excellent or Very Good Health
A.S. % of population age 12+, by year

	PEI		Canada	
	%	CI	%	CI
2001	64.9	63.3-66.4	62.7	62.4-62.9
2003	66	64.0-68.1	59.8	59.6-60.1

Excellent or Very Good Health, PEI 2003
% of population, by age and sex

	12-19 yr.		20-34 yr.		35-49 yr.		50-64 yr.		65+ yr.	
	%	CI	%	CI	%	CI	%	CI	%	CI
M	71.2	61.6-79.3	80.5	72.2-86.8	72.2	64.2-78.9	60.9	51.7-69.4	40.9	33.2-49.1
F	54.5	44.4-64.3	68.2	59.7-75.6	70.7	62.3-77.9	56.4	48.5-64.0	50.5	43.2-57.8

Excellent or Very Good Health, PEI
% of population age 12+, by health region

	WP		EP		Q		K	
	%	CI	%	CI	%	CI	%	CI
2001	56	51.4-60.6	61.2	57.0-65.2	66.7	63.6-69.8	62.8	58.8-66.6
2003	62.6	55.5-69.2	69.3	64.2-73.9	64.6	60.2-68.8	58.5	52.4-64.3

Oral Health, 2003
A.S. % of population age 12+

	PEI		Canada	
	%	CI	%	CI
Excellent or very good oral health	61.2	58.9-63.4	55.1	54.8-55.4
Chewing limitations	5.5	4.5-6.5	7.4	7.2-7.5

1.2 Functional Health Status

Definition: Individuals answer yes or no to a series of questions based on 9 dimensions of functioning: vision, hearing, speech, mobility, dexterity, feelings, cognition, memory and pain. These are combined with societal preferences for various health states to produce an overall **Health Utility Index** of functional health on a scale of 0 to 1. A score of 0.8 to 1.0 is considered to be very good or perfect health; scores below 0.8 are considered to indicate moderate or severe functional health problems (disabilities).The rate is age-standardized to the 1991 Canadian population.

Sources: Statistics Canada: CCHS 2003, CCHS 2000/01[3]

Data Tables:

Moderate or Severe Functional Health Problems
A.S. % of population age 12+, by year

	PEI		Canada	
	%	CI	%	CI
2001	18.5	17.2-19.8	18.3	18.1-18.5
2003	16.8	15.2-18.4	16.4	16.2-16.7

Moderate or Severe Functional Health Problems, PEI 2003
% of population, by age and sex

	12-19 yr.		20-34 yr.		35-49 yr.		50-64 yr.		65+ yr.	
	%	CI	%	CI	%	CI	%	CI	%	CI
M	15.5	8.37-27.2	8.6	4.21-16.9	15.2	9.12-24.2	17.7	11.0-27.1	33.2	23.0-45.3
F	8.63	3.95-17.9	12.6	6.88-21.9	18.1	10.9-28.6	22.7	15.4-32.0	36	27.3-45.6

Moderate or Severe Functional Health Problems, PEI
% of population age 12+, by health region

	WP		EP		Q		K	
	%	CI	%	CI	%	CI	%	CI
2001	22.6	18.9-26.7	21	17.9-24.5	18.1	15.7-20.8	15.9	13.4-18.9
2003	25.7	18.1-35.1	13.6	10.1-18.1	19.7	15.7-24.5	14.3	9.61-20.7

1. HEALTH STATUS

1.3 Life Expectancy

Definition: Life expectancy is the number of years a person would be expected to live, on average, starting from birth. Calculation uses birth data and annual mortality rates for Greville's method for abridged lifetables, with 5-year age groupings of population and mortality rates.

Sources: Statistics Canada, Vital Statistics, Birth and Death Databases[5]

Data Table:

Life Expectancy at Birth
Expected age in years

	Male		Female	
Year	PEI	Canada	PEI	Canada
1980	72.4	71.7	79.7	78.9
1981	72.9	72.1	80.8	79.3
1982	73.5	72.4	81.2	79.4
1983	72.4	72.7	79.8	79.7
1984	72.9	73.1	80.2	79.9
1985	72.7	73.1	80.6	79.9
1986	71.9	73.3	80.1	79.9
1987	73.8	73.6	80.7	80.3
1988	73.3	73.6	81.2	80.3
1989	73.0	74.0	81.2	80.6
1990	73.1	74.4	80.5	80.8
1991	72.5	74.6	80.8	80.9
1992	74.0	74.8	81.3	81.2
1993	74.2	74.8	80.1	80.9
1994	74.7	75.0	81.4	81.0
1995	73.8	75.1	81.2	81.1
1996	73.8	75.5	80.7	81.2
1997	76.3	75.8	82.6	81.3
1998	74.9	76.0	79.9	81.5
1999	75.7	76.3	81.2	81.7
2000	75.1	76.7	81.4	81.9
2001	75.2	77.0	82.6	82.1

Health-adjusted Life Expectancy (HALE) is the number of years in perfect health that a person would expect to live, given the current morbidity and mortality conditions. Calculation uses Life Expectancy and the Health Utility Index to measure quality of life.

	Male		Female	
Year	PEI	Canada	PEI	Canada
2001	67.3	68.3	71.7	70.8

Infant Mortality is the number of infants who die in the first year of life per 1,000 live births.
The three year average for the period 1999 to 2001 for PEI: 5.8; for Canada: 5.3

1. HEALTH STATUS

1.4 Premature Death by Cause

Definition: Potential Years of Life Lost (PYLL) with premature death before age 75; years per 100,000 population age 0 to 74, age-standardized to the 1991 Canadian population

- Cancer: all malignant cancer deaths (ICD-9 140-208) including lung, colorectal, breast, and prostate cancers
- Heart and Stroke: all circulatory disease deaths (ICD-9 390-459) including ischaemic heart disease (includes AMI/heart attack), cerebrovascular diseases (stroke), and other circulatory diseases
- Injury: unintentional injury deaths (ICD-9 E800-E929, excluding E870-E879), including accidents due to causes such as motor vehicle collisions, falls, drowning, burns, and poisoning, but not medical misadventures/complications or suicide
- Suicide: suicide deaths (ICD-9 E950-E959)
- Respiratory: all respiratory deaths (ICD-9 460-519), including pneumonia, influenza, bronchitis, emphysema, asthma, and all other respiratory diseases

Sources: Statistics Canada, Vital Statistics, Death Database[5]

Data Tables:

Leading Causes of PYLL (Rate per 100,000 population 0-74, 3 year ave. 1996-98)

	Male				Female			
	PEI		Canada		PEI		Canada	
	Rate	CI	Rate	CI	Rate	CI	Rate	CI
Cancer	1764	1705.4-1822.8	1652	1648.2-1655.8	1515	1460.1-1569.3	1553	1549.5-1556.9
Lung	502	470.7-533.7	480	477.5-481.6	437	407.4-466.4	340	337.9-341.4
Colorectal	186	167.1-205.6	154	152.6-155.0	108	93.3-122.6	118	117.3-119.4
Breast	-	-	-	-	324	298.4-349.2	362	359.7-363.3
Prostate	49	39.3-59.1	60	59.7-61.1	-	-	-	-
Heart and Stroke	1773	1714.3-1832.0	1376	1372.4-1379.3	561	527.1-593.8	597	595.0-599.6
IHD	1173	1124.6-1220.6	891	887.7-893.4	291	267.2-315.4	268	266.0-269.1
Stroke	212	191.7-232.8	163	161.7-164.1	124	107.8-139.2	139	138.2-140.4
Injury exclude	1366	1313.7-1417.2	1028	1025.2-1031.2	602	567.5-636.7	354	352.7-356.2
Injury: Suicide	450	420.6-480.3	684	681.2-686.2	61	50.1-72.2	177	175.8-178.4
Respiratory	254	231.2-276.1	222	220.9-223.8	197	177.6-217.2	165	163.3-165.7

PYLL (all causes), PEI 3 year ave. 1996-98
(Rate per 100,000 population 0-74,by health region)

PEI		WP		EP		Q		K	
Rate	CI	Rate	CI	Rate	CI	Rate	CI	Rate	CI
5635	5562.0-5707.6	4918	4709.2-5125.9	5326	5181.5-5469.9	5938	5831.5-6044.8	5654	5472.9-5836.0

Leading Cause of Death, PEI 2000 (% of all-cause deaths, by age)

	20 - 34	35-49	50-64	65-74	75-84	85+
Cancer	10	42	44	40	20	16
Injury	73	30	4	2	3	3
Heart and Stroke	0	19	34	38	41	50

Source: PEI Vital Statistics Annual Report

1. HEALTH STATUS

1.5 Low Birth Weight

Definition: Live births greater than 500 grams and less than 2,500 grams, expressed as a percentage of all live births with a known birth weight greater than 499 grams.
Low birth weights are adjusted for borderline viable births, since over time there has been increased registration of live births with birth weight less than 500 grams. The adjustment improves comparability of this indicator over an extended time period.

Sources: Statistics Canada, Vital Statistics, Birth Database[5]

Data Table:

Low Birth Weight
Rate as % of live births, by year

Year	PEI	Canada
1980	3.8	5.8
1981	5.4	5.8
1982	4.8	5.6
1983	4.5	5.5
1984	4.2	5.5
1985	4.9	5.5
1986	4.9	5.4
1987	5.2	5.5
1988	5.9	5.6
1989	4.7	5.5
1990	4.7	5.5
1991	4.5	5.5
1992	5.2	5.4
1993	4	5.6
1994	6.1	5.7
1995	4.6	5.8
1996	5.1	5.7
1997	5.1	5.7
1998	4.9	5.7
1999	5.2	5.5
2000	4.2	5.5
2001	3.7	5.5

1. HEALTH STATUS

1.6 Obesity

Definition: Self-reported height and weight were used to calculate **Body Mass Index**.
BMI is calculated as follows: weight in kilograms divided by height in meters squared.
BMI is a common method of determining if an individual's weight is in a healthy range based on their height. Pregnant women are excluded. International standards for interpreting the index are:

- underweight BMI < 18.5
- acceptable weight BMI = 18.5 to 24.9
- overweight BMI = 25 to 29.9
- obese BMI ≥ 30

Lower thresholds[22] are used for persons under age 18.

Sources: Statistics Canada: CCHS 2003, CCHS 2000/01[3]

Data Tables:

Body Mass Index Categories
% of population age 12+, by year

		PEI		Canada	
	Year	%	CI	%	CI
Acceptable	2001	48.1	46.4-49.7	55.9	55.6-56.2
	2003	44.7	42.5-46.9	54.6	54.3-54.9
Overweight	2001	35.8	34.2-37.4	30.6	30.4-30.9
	2003	35.9	33.7-38.0	31.5	31.2-31.7
Obese	2001	16.1	14.9-17.3	13.5	13.3-13.7
	2003	19.5	17.7-21.3	13.9	13.7-14.1

Obesity, PEI 2003
% of population, by age and sex

	12-19 yr.		20-34 yr.		35-49 yr.		50-64 yr.		65 + yr.	
	%	CI	%	CI	%	CI	%	CI	%	CI
M	6.09	2.22-15.6	16.8	10.6-25.8	27.1	19.5-36.4	30.6	22.9-39.6	18.9	12.9-26.9
F	3.99	1.47-10.3	17.8	12.4-24.9	26.3	19.3-34.7	17.2	12.4-23.4	17	12.2-23.3

Obesity, PEI
% of population age 12+, by health region

	WP		EP		Q		K	
	%	CI	%	CI	%	CI	%	CI
2001	18.7	15.4-22.6	13.5	11.0-16.4	16.4	14.0-19.2	18.5	15.5-21.9
2003	21.2	15.9-27.7	21.1	16.7-26.2	19.7	16.1-23.9	17.7	13.7-22.4

1. HEALTH STATUS

1.7 Chronic Conditions

Definition: Population aged 12 and over who report that they have been diagnosed by a health professional as having a chronic condition.

- Arthritis: includes both rheumatoid arthritis and osteoarthritis, excludes fibromyalgia
- Diabetes: includes all types of diabetes
- Asthma: includes asthma, excludes bronchitis or emphysema
- Heart and Stroke: includes heart disease and stroke, excludes high blood pressure
- Cancer: includes all types of cancer

NDSS defines a prevalent case of diabetes as a person identified in the physician administrative data with at least 2 diagnoses of diabetes within 2 years, over the period March 1995 to March 2000.

Sources: Statistics Canada: CCHS 2003, CCHS 2000/01[3]
National Diabetes Surveillance System[6]

Data Tables:

Chronic Disease
A.S. % of population age 12+, by year Source: CCHS

		PEI		Canada	
		%	CI	%	CI
Arthritis	2001	16.5 *	15.4-17.6	14.3	14.1-14.4
	2003	18.3	16.8-19.8	15.2	15.0-15.3
Asthma	2001	8.77	7.82-9.71	8.61	8.45-8.77
	2003	9.32	8.01-10.6	8.59	8.44-8.75
Heart and Stroke	2001	4.97	4.33-5.61	5.3	5.18-5.41
	2003	4.94	4.10-5.79	5.18	5.07-5.29
Diabetes	2001	4.12	3.50-4.74	3.84	3.74-3.94
	2003	4.7	3.82-5.58	4.14	4.04-4.24
Cancer	2001	1.6	1.21-1.99	1.63	1.56-1.70
	2003	1.2	0.76-1.64	1.51	1.44-1.57

Diabetes Prevalence, PEI 2002
% of population, by age and sex Source: NDSS

	20-34 yr.	35-49 yr.	50-64 yr.	65+ yr.
M	1	3	10	19
F	1	3	7	15

Diabetes Prevalence, PEI 2002
Count and % of population age 20+, by health region Source: NDSS

WP		EP		Q		K		PEI	
#	%	#	%	#	%	#	%	#	%
771	7	1,996	6	3,885	5	1,094	5	7,746	6

1. HEALTH STATUS

1.8 Depression

Definition: Population aged 12 and over who show symptoms of depression, based on their responses to a set of questions that establishes the probability of suffering a "major depressive episode" as defined by DSM-III-R and ICD-10. Probable risk (0.90) of depression was indicated with at least one episode of 2 weeks or more with depressed mood, loss of interest, and health problems.

Sources: Statistics Canada: CCHS 2003, CCHS 2000/01[3]

Data Tables:

Depression
A.S. % of population age 12+, by year

	PEI		Canada	
	%	CI	%	CI
2001	6.37	5.53-7.20	7.37	7.22-7.51
2003	6.28	5.14-7.43	6	5.84-6.27

Depression, PEI 2003
% of population, by age and sex

	12-19 yr.		20-34 yr.		35-49 yr.		50-64 yr.		65+ yr.	
	%	CI	%	CI	%	CI	%	CI	%	CI
M	3.37	1.08-10.0	6.65	3.28-13.0	5.03	2.65-9.36	0.31	0.07-1.26	1.93	0.39-8.98
F	6.41	1.82-20.2	13.5	8.82-20.0	8.39	4.82-14.2	5.71	2.94-10.8	1.93	0.76-4.80

Depression, PEI
% of population age 12+, by health region

	WP		EP		Q		K	
	%	CI	%	CI	%	CI	%	CI
2001	6.28	4.36-8.95	6.22	4.43-8.66	6.36	5.02-8.02	5.36	3.68-7.75
2003	3.64	1.79-7.28	7.92	5.23-11.8	5.2	3.49-7.68	5.89	3.59-9.52

1. HEALTH STATUS

1.9 Cancer Incidence

Definition: New cases at primary sites of cancer (malignant neoplasms) for all cancers (ICD-9 140-208), excluding non-melanoma skin cancer. Rate expressed per 100,000 population age-standardized to the 1991 Canadian population.

Sources: Statistics Canada, Vital Statistics, Canadian Cancer Registry[7], and Demography Division (population estimates), Health Canada (2002 - 2004 estimates)

Data Tables:

Cancer Incidence,
A.S. Rate per 100,000 population, by year

	Male		Female	
	PEI	Canada	PEI	Canada
1980	432.4	406.1	313.3	305.5
1981	434.6	442.1	322.9	328.1
1982	429.7	440.7	342.9	321.0
1983	398.7	448.4	322.2	332.8
1984	445.5	450.0	301.9	329.5
1985	403.9	449.8	319.2	335.5
1986	348.7	451.9	245.0	324.9
1987	466.5	456.3	294.0	330.7
1988	416.5	458.4	319.4	336.0
1989	483.0	451.5	334.5	330.0
1990	466.8	457.6	367.6	333.2
1991	415.1	469.0	352.6	337.1
1992	497.5	484.4	369.8	341.9
1993	537.6	498.6	318.2	342.1
1994	531.5	484.4	385.1	340.6
1995	508.5	459.8	343.1	339.0
1996	461.3	451.0	350.0	337.1
1997	501.8	452.9	349.8	340.1
1998	493.0	451.2	336.0	347.2
1999	493.3	462.4	336.2	347.8
2000	462.5	462.0	356.1	346.5
2001	494.0	460.5	360.0	342.9
2002 f	470.1	442.0	356.1	348.3
2003 f	468.0	439.0	356.0	349.5
2004 f	534.0	449.2	382.0	350.8

Notes: Graph 3.1.9 uses 3 year moving average rates for PEI, to smooth out annual fluctuations.

2. NON-MEDICAL DETERMINANTS OF HEALTH

2.1 Smoking

Definition: Population aged 12 and over who reported being either a smoker (daily or occasional) or a non-smoker (former or never smoked). Individuals answer a series of questions on frequency and amount smoked. This is used to create the following smoking status categories: daily smoker, occasional smoker, former smoker, never smoked.

Sources: Statistics Canada: CCHS 2003, CCHS 2000/01[3], NPHS 1994/95[4]

Data Tables:

Daily Smoking
% of population age 12+, by year

		Male				Female			
	Source	PEI		Canada		PEI		Canada	
1966	LFS[9]	54		54		28		33	
1975	LFS[9]	44		44		30		32	
1986	LFS[9]	34		31		28		27	
1990	HPS[12]	35		30		25		27	
1995	NPHS[4]	36	(30.4-40.4)	26	(24.7-27.2)	19	(15.6-23.2)	23	(21.6-23.8)
1997	NPHS[4]	36	(30.4-40.4)	26	(24.8-26.9)	18	(14.1-22.5)	21	(20.4-22.2)
1999	NPHS[4]	33	(28.0-38.2)	24	(23.1-25.6)	22	(18.3-26.8)	21	(20.2-22.6)
2001	CCHS[3]	26	(23.2-28.7)	24	(23.0-24.0)	23	(20.3-25.9)	19	(19.0-19.9)
2003	CCHS[3]	22	(18.7-26.3)	19	(18.8-19.9)	18	(15.4-21 3)	16	(15.9-16.8)

Daily Smoking , PEI 2003
% population, by age and sex

	12-19 yr.		20-34 yr.		35-49 yr.		50-64 yr.		65+ yr.	
	%	CI	%	CI	%	CI	%	CI	%	CI
M	9.4	5.35-15.9	34.4	25.0-45.3	26.1	19.1-34.6	18	12.0-26.2	13.5	8.80-20.1
F	10.1	5.66-17.4	20	14.5-27.1	23.8	17.5-31.6	22	16.5-28.6	7.8	4.62-12.8

Daily Smoking, PEI
% of population age 12+, by health region

	WP		EP		Q		K	
	%	CI	%	CI	%	CI	%	CI
2001	22.9	19.2-27.0	25.1	21.6-28.9	24.4	21.6-27.3	21.2	18.3-24.5
2003	25.6	19.3-33.0	20	15.5-25.4	18.8	15.5-22.6	21.3	16.8-26.6

2. NON-MEDICAL DETERMINANTS OF HEALTH

2.2 Drinking

Definition: **Heavy drinking:** Population aged 12 and over who are current drinkers and who reported drinking 5 or more drinks per occasion, at least 12 times in the past 12 months.

Sources: Statistics Canada: CCHS 2003, CCHS 2000/01[3]

Data Tables:

Frequency of Drinking 5+ drinks per occasion in past 12 months
A.S. % of current drinkers age 12+, by year

		PEI		Canada	
		%	CI	%	CI
2001	never	53.8	51.8-55.8	56.7	56.4-57.0
	<12 times	23.1	21.5-24.7	23.4	23.2-23.8
	heavy drinking	23.1	21.6-24.9	19.8	19.6-20.1
2003	never	48.6	45.6-51.5	53.6	53.3-53.9
	<12 times	26	23.4-28.6	25.3	25.0-25.8
	heavy drinking	25.4	22.9-28.0	21.1	20.9-21.4

Heavy Drinking, PEI 2003
% of current drinkers, by age and sex

	12-19 yr.		20-34 yr.		35-49 yr.		50-64 yr.		65+ yr.	
	%	CI	%	CI	%	CI	%	CI	%	CI
M	36.3	23.4-51.5	62.6	51.6-72.4	31.4	23.3-40.7	22.7	14.7-33.3	11.3	6.08-20.1
F	28.1	14.4-47.7	20.8	14.0-29.8	11.9	6.57-20.5	6.5	3.69-11.2	1.47	0.271-7.6

Heavy Drinking, PEI
% of current drinkers age 12+, by health region

	WP		EP		Q		K	
	%	CI	%	CI	%	CI	%	CI
2001	24.9	20.1-30.5	24.4	20.3-29.1	22.6	19.4-26.1	22.2	18.1-26.9
2003	31.5	22.9-41.6	23.9	17.9-31.1	25.1	20.6-30.2	27.3	19.9-36.2

2. NON-MEDICAL DETERMINANTS OF HEALTH

2.3 Physical Activity

Definition: Population aged 12 and over reporting level of physical activity, based on their responses to questions about the type of activity, frequency and duration of their participation in leisure-time physical activity. Intensity of each activity was assigned a value for the metabolic energy demand. Categories of physical activity used are:

- Active: average 3.0 or more kcal/kg/day of energy expenditure. This amount of exercise is required for cardiovascular health benefit
- Moderate: average 1.5 - 2.9 kcal/kg/day of energy expenditure. This amount of exercise may produce some health benefits, but little cardiovascular benefit
- Inactive: average below 1.5 kcal/kg/day of energy expenditure

Sources: Statistics Canada: CCHS 2003, CCHS 2000/01[3]

Data Tables:

Physical Activity Level
A.S. % of population age 12+, by year

		PEI		Canada	
		%	CI	%	CI
Inactive	2001	52.0	49.6-54.5	49.1	48.6-49.5
	2003	54.3	52.1-56.5	47.4	47.2-47.7
Moderate	2001	20.7	18.9-22.4	21.6	21.3-21.9
	2003	21.9	20.0-23.8	25.3	24.8-25.3
Active	2001	19.6	18.2-21.1	21.0	20.7-21.4
	2003	23.8	21.9-25.7	27.5	27.3-27.8

Physically Inactive, PEI 2003
% of population, by age and sex

	12-19 yr.		20-34 yr.		35-49 yr.		50-64 yr.		65+ yr.	
	%	CI	%	CI	%	CI	%	CI	%	CI
M	29	20.4-39.3	45.4	35.1-56.2	59.2	50.2-67.6	64.1	54.9-72.4	57.7	48.7-66.2
F	33.7	24.6-44.2	52.3	43.8-60.7	60	51.9-67.7	61.2	53.0-68.8	74.8	67.3-81.1

Physical Activity Level, PEI
% of population age 12+, by health region

		WP		EP		Q		K	
		%	CI	%	CI	%	CI	%	CI
Inactive	2001	49.2	44.5-53.9	54.7	50.5-58.9	55.6	52.2-59.1	46.7	42.7-50.9
	2003	62.7	55.5-69.4	49.4	43.7-55.2	56.7	52.1-61.2	52.5	46.2-58.7
Moderate	2001	21.2	17.6-25.3	23.9	20.5-27.7	22.3	19.6-25.3	24.1	20.7-27.8
	2003	16.1	11.6-21.8	26.1	21.1-31.8	20.2	16.8-24.1	24.7	19.1-30.8
Active	2001	29.6	25.3-34.3	21.3	18.0-25.2	22.0	19.3-25.1	29.1	25.2-33.4
	2003	21.2	15.8-27.8	24.4	19.7-29.9	23.0	19.4-27.1	22.9	17.8-28.9

2. NON-MEDICAL DETERMINANTS OF HEALTH

2.4 Breast-feeding

Definition: Children born in the past year who were breast-feeding at time of discharge from hospital.

Sources: PEI Reproductive Care Program[8]

Data Tables:

Breast feeding, PEI
% of new mothers, by year

Year	% breast feed
1990	48.0
1991	44.0
1992	50.2
1993	52.1
1994	53.7
1995	54.5
1996	57.0
1997	61.4
1998	59.3
1999	61.7
2000	62.2
2001	64.0

Source: PEI Reproductive Care Program

Breast feeding
% of new mothers, PEI, by health regions

	WP	EP	Q	K
1999	44.9	61.6	66.4	60.0
2000	40.0	60.6	70.0	55.3
2001	48.5	64.5	69.4	57.9

Source: PEI Reproductive Care Program

2. NON-MEDICAL DETERMINANTS OF HEALTH

2.5 Diet

Definition: Population aged 12 and over, by the average number of times per day that they consume fruits and vegetables. This may not correspond to the servings recommended by Canada's Food Guide.

Sources: Statistics Canada: CCHS 2003, CCHS 2000/01[3]

Data Tables:

Fruit and Vegetable Consumption (5 or more times per day)
A.S. % of population age 12+, by year

	PEI		Canada	
	%	CI	%	CI
2001	34.7	33.1-36.3	37.3	37.0-37.6
2003	31.4	29.2-33.5	41.5	41.2-41.8

Fruit and Vegetable Consumption (5 or more times per day), PEI 2003
% of population, by age and sex

	12-19 yr.		20-34 yr.		35-49 yr.		50-64 yr.		65+ yr.	
	%	CI	%	CI	%	CI	%	CI	%	CI
M	37.3	27.8-47.9	25.2	16.8-36.0	16.8	11.5-23.9	26.2	19.1-34.9	30.9	23.0-40.2
F	31.8	23.2-41.7	32.7	25.5-40.9	35	27.2-43.7	44.4	36.4-52.7	43.5	36.1-51.3

Fruit and Vegetable Consumption (5 or more times per day), PEI
% of population age 12+, by health region

	WP		EP		Q		K	
	%	CI	%	CI	%	CI	%	CI
2001	32.4	28.2-36.8	33.4	29.7-37.3	36.2	33.0-39.6	37.4	33.4-41.4
2003	19.4	14.7-25.2	34.4	29.1-40.1	32	27.8-36.5	34.4	28.5-40.9

2. NON-MEDICAL DETERMINANTS OF HEALTH

2.6 Condom Use

Definition: Individuals reporting use of a condom the last time had sex. "Did you use a condom the last time you had sexual intercourse?" was asked of persons aged 15 to 49 years in a relationship lasting less than 12 months.

This module changed since the previous survey ("how often did you use a condom in the past 12 months?") and is therefore not comparable to earlier results.

Sources: Statistics Canada: CCHS 2003[3]

Data Tables:

Used Condom the last time had sex, 2003
% of population age 15-49 yr with recent partner

PEI		Canada	
%	CI	%	CI
53.4	45.3-61.3	52.8	51.6-54.0

Used Condom the last time, PEI 2003
% of population with recent partner, by age and sex

	15-19 yr.		20-34 yr.		35-49 yr.	
	%	CI	%	CI	%	CI
M	93.9	80.7-98.2	70.7	51.1-84.8	31.8	18.7-48.6
F	81.2	59.2-92.8	31.9	19.5-47.6	10.9	4.3-24.8

Used Condom the last time, PEI 2003
% of population age 15-49 yr with recent partner, by health region

WP		EP		Q		K	
%	CI	%	CI	%	CI	%	CI
59.4	39.3-76.8	56.3	40.3-71.1	49.3	37.0-61.7	56.5	39.0-72.6

2. NON-MEDICAL DETERMINANTS OF HEALTH

2.7 Education

Definition: Individuals aged 20 and older, reporting highest level of education obtained. Mutually exclusive categories used are:

- Less than high school: no schooling, elementary, or some secondary school
- High school graduates: high school graduation certificate, or some college or university
- Post-secondary graduates: diploma, certificate, or degree

Sources: Statistics Canada: CCHS 2003, CCHS 2000/01[3]

Data Tables:

Education Level
% of population age 20+, by year

		PEI		Canada	
		%	CI	%	CI
Less than High School	2001	25.1	23.3-27.0	22.2	21.9-22.6
	2003	25	22.5-27.8	19	18.6-19.3
High School Grad	2001	25.8	23.9-27.9	28.1	27.7-28.5
	2003	23.5	20.8-26.4	26.8	26.3-27.2
Post-secondary Grad	2001	49.1	46.8-51.3	49.6	49.2-50.1
	2003	51.5	48.2-54.7	54.2	53.7-54.7

Education Level, PEI 2003
% of population, by sex and age

		20-34 yr.		35-49 yr.		50-64 yr.		65+ yr.	
		%	CI	%	CI	%	CI	%	CI
Less than High School	M	14.2	9.08-21.5	26.9	19.6-35.8	32.3	24.5-41.3	62	53.7-69.7
	F	6.07	3.18-11.3	13.4	7.97-21.5	24	17.9-31.2	47.6	40.3-54.9
High School Grad	M	35.8	26.2-46.7	17.3	12.0-24.3	15.2	10.4-21.8	7.5	4.36-12.6
	F	35.6	27.7-44.2	28.1	21.3-36.1	20.9	14.7-28.9	17.4	11.9-24.6
Post-secondary Grad	M	50	39.4-60.6	55.8	46.6-64.6	52.5	43.3-61.5	30.5	23.4-38.7
	F	58.4	49.7-66.5	58.5	50.0-66.6	55.1	47.0-63.0	35.1	28.2-42.6

Education Level, PEI 2003
% of population age 20+, by health region

	WP		EP		Q		K	
	%	CI	%	CI	%	CI	%	CI
Less than High School	41	33.6-48.9	26.2	21.5-31.4	19.1	15.4-23.3	32.1	26.4-38.4
High School Grad	22.4	16.2-30.1	26.6	20.9-33.1	21.4	17.6-25.8	26.1	20.6-32.5
Post-secondary Grad	36.6	29.4-44.4	47.3	41.0-53.6	59.5	54.5-64.4	41.8	35.2-48.7

2. NON-MEDICAL DETERMINANTS OF HEALTH

2.8 Unemployment

Definition: Labour force aged 15 and over who did not have a job. The labour force consists of people who are currently employed and people who are unemployed but were available to work and had looked for work. Not included are persons too discouraged to seek employment.

Source: Statistics Canada, Labour Force Survey[9]

Data Table:

Unemployment
% of labour force age 15+, by year

	PEI	Canada
1980	10.5	7.5
1981	11.3	7.6
1982	12.6	11
1983	12.1	11.9
1984	12.3	11.3
1985	13.5	10.7
1986	13.2	9.6
1987	12.5	8.8
1988	12.4	7.8
1989	13.7	7.5
1990	14.6	8.1
1991	16.7	10.3
1992	18.1	11.2
1993	17.6	11.4
1994	17.2	10.4
1995	15	9.4
1996	14.7	9.6
1997	15.4	9.1
1998	13.8	8.3
1999	14.4	7.6
2000	12	6.8
2001	11.9	7.2
2002	12.1	7.7
2003	11.1	7.6

2. NON-MEDICAL DETERMINANTS OF HEALTH

2.9 Income

Definition: A series of questions on household income and household size were used to define a concept of income adequacy. The categories used are:

- Low income: <$15,000 for 1-2 persons, <$20,000 for 3-4 persons, <$30,000 for 5+
- Middle income: $15 to 30,000 for 1-2 persons, $20 to 40,000 for 3-4 persons, $30 to 60,000 for 5+
- High income: $30,000+ for 1-2 persons, $40,000+ for 3-4 persons, $60,000+ for 5+

These categories were not adjusted over time for cost of living.

Source: Statistics Canada: CCHS 2003, CCHS 2000/01[3]

Data Tables:

Income Adequacy Level, 2003
A.S. % population age 12+

		PEI		Canada	
		%	CI	%	CI
Low Income	2001	12	10.8-13.1	11.5	11.3-11.7
	2003	11.9	10.3-13.6	9.11	8.93-9.28
Middle Income	2001	69.1	67.5-70.8	58.1	57.8-58.4
	2003	68.2	65.8-70.6	54.5	54.2-54.8
High Income	2001	18.9	17.5-20.3	30.4	30.1-30.6
	2003	19.9	17.9-21.9	36.4	36.1-36.7

Income Adequacy Level, PEI 2003
% population age 12+, by age and sex

		12-19 yr.		20-34 yr.		35-49 yr.		50-64 yr.		65+ yr.	
		%	CI	%	CI	%	CI	%	CI	%	CI
Low Income	M	10.7	4.3-24.1	6.27	3.13-12.2	6.22	3.05-12.3	6.90	3.27-14.0	17	10.6-26.2
	F	12.8	6.60-23.2	18.3	12.1-26.7	9.96	5.82-16.5	9.6	5.77-15.6	27	19.8-35.6
Middle Income	M	76.5	61.7-86.8	59.6	48.1-70.2	74.4	65.1-81.9	63.3	52.9-72.5	72.1	62.4-80.0
	F	59.9	47.7-71.0	71.8	62.9-79.3	73.2	65.1-80.0	63.7	54.3-72.2	65.5	56.6-73.5
High Income	M	12.9	5.80-26.2	34.1	23.9-46.1	19.4	12.8-28.2	29.8	21.1-40.4	10.9	6.21-18.4
	F	27.3	17.9-39.4	9.85	5.71-16.4	16.8	11.5-23.9	26.7	18.8-36.3	7.47	3.73-14.4

Income Adequacy Level, PEI 2003
% population age 12+, by region

	WP		EP		Q		K	
	%	CI	%	CI	%	CI	%	CI
Low Income	13.1	8.77-19.1	7.15	4.83-10.5	13.4	10.4-17.1	11.3	7.94-15.8
Middle Income	78	70.6-83.9	72.9	66.5-78.4	62.8	57.8-67.6	72.2	65.5-78.0
High Income	8.93	5.09-15.2	20	14.9-26.3	23.8	19.6-28.5	16.5	11.6-23.0

2. NON-MEDICAL DETERMINANTS OF HEALTH

2.10 Crime

Definition: The number of Criminal Code offences expressed as a rate per 100,000 population, for violent crimes, property and other crimes.

- Violent crimes are "person offences", which include homicide, attempted murder, sexual and non-sexual assault, abduction, and robbery
- Property crimes include breaking and entering, motor vehicle theft, theft, possession of stolen goods, and fraud. The crime rate is based on the number of incidents reported to or by the police
- Youth are age 12 to 17; adults are age 18+

Source: Statistics Canada, Canadian Centre for Justice Statistics, Uniform Crime Reporting Survey[11]

Data Table:

Crime - Adults charged, aged 18+ years
Rate per 100,000 population

	Violence				Property			
	PEI		Canada		PEI		Canada	
	Males	Females	Males	Females	Males	Females	Males	Females
1996	625.2	73.5	931.2	129.5	830.8	199.1	1144.6	323.3
1997	583.1	70.7	894.2	132.1	948.2	154.7	1023.8	289.6
1998	520.6	68.3	865.9	133.4	695.5	138.4	969	270.2
1999	453.5	63.7	833.8	134.1	970.5	134.8	900.1	246.4
2000	551.8	63	857	145.1	683.8	111.1	835.8	227.6
2001	603.2	87.9	884.2	158.2	677.3	144.6	819.8	230
2002	637	83	858.7	151.8	712.2	164.1	790.2	224.4

Source: Statistics Canada

Crime - Youth charged, aged 12 to 17 years
Rate per 100,000 population

	Violence				Property			
	PEI		Canada		PEI		Canada	
	Males	Females	Males	Females	Males	Females	Males	Females
1996	778.3	384.9	1385.9	451.9	4199.8	954	4182.8	1256
1997	564	184.5	1321.4	473.3	2578.2	570.2	3643.6	1069.2
1998	784.1	181.7	1314	475.1	2288.4	247.8	3349.7	1003.5
1999	448.7	130.4	1256.2	444.2	2339.7	423.9	2957.4	905.5
2000	531	98.1	1343.4	480.7	2429.6	343.3	2820.8	899.7
2001	741.8	327	1380.7	507	2902.8	490.5	2696.6	911.2
2002	587.1	277.3	1332.7	512.1	1824.8	489.4	2519.6	900.7

2. NON-MEDICAL DETERMINANTS OF HEALTH

2.11 Social Support

Definition: Individuals rate frequency of support on a 5-point scale to a series of nineteen questions based on 4 dimensions of social support: tangible support, affectionate support, positive social interaction, and emotional or informational support. The total score on the Medical Outcomes Study Social Support Survey ranges from 19 to 95. A score of 74 or lower corresponds to the lowest quintile (20%) of the Canadian population[*].

Canada was represented by 86 health regions that include all provinces and territories except Ontario and Manitoba. This was the result of the optional content selection process.

Sources: Statistics Canada: CCHS 2003, CCHS 2000/01[3]

Data Tables:

Low Level of Social Support
A.S. % of population age12+, by year

	PEI		Canada	
	%	CI	%	CI
2001	14.5	13.3-15.7	19.9	19.6-20.2
2003	14.2	12.5-15.9	NA	

Low Level of Social Support, PEI 2003
% of population, by age and sex

	12-19 yr.		20-34 yr.		35-49 yr.		50-64 yr.		65+ yr.	
	%	CI	%	CI	%	CI	%	CI	%	CI
M	15.1	8.05-26.5	10.4	5.64-18.4	13.1	8.52-19.7	12	7.15-19.4	22.4	14.7-32.6
F	6.1	2.91-12.3	13.2	8.27-20.3	16.4	10.9-24.0	17.2	11.5-25.1	21.6	15.3-29.6

Low Level of Social Support, PEI
% of population age12+, by health region

	WP		EP		Q		K	
	%	CI	%	CI	%	CI	%	CI
2001	14.3	11.3-17.9	13.6	10.9-16.8	15.3	13.0-17.9	14	11.1-17.5
2003	14.8	9.65-22.0	15.1	11.7-19.2	13.7	10.6-17.5	15	11.1-19.9

[*] Schopflocher, Don. An indicator of social support from the Canadian Community Health Survey. Alberta Health and Wellness: Data Points, June 2002.

2. NON-MEDICAL DETERMINANTS OF HEALTH

2.12 Changes to Improve Health

Definition: Individuals aged 15 and older provide unprompted answer to "is there anything you intend to do to improve your physical health in the next year?"

Sources: Statistics Canada: CCHS 2003, CCHS 2000/01[3]

Data Tables:

Changes to Improve Health in Next Year
% of population age 15+

	PEI 2003		PEI 2001	
	%	95% CI	%	95% CI
Nothing	49.9	46.8-53.0	53.5	51.3-55.7
More exercise	30.6	27.9-33.5	27.3	25.3-29.3
Lose weight	8.17	6.53-10.2	8.53	7.25-10.0
Improve diet	7.81	6.41-9.49	8.22	7.05-9.56
Reduce or quit smoking	8.05	6.56-9.85	8.17	7.03-9.48
Reduce stress	0.251	0.12 -0.522	1.99	1.41-2.79
Take vitamins	0.317	0.114-0.879	0.466	0.248-0.874
Other	2.47	1.62-3.75	1.28	0.872-1.89

Any Change to Improve Health in Next Year, PEI 2003
% of population, by age and sex

	15-19 yr.		20-34 yr.		35-49 yr.		50-64 yr.		65+ yr.	
	%	CI	%	CI	%	CI	%	CI	%	CI
M	42.5	29.9-56.2	49.5	38.9-60.1	57.2	47.9-66.1	42.1	33.2-51.6	17.6	12.2-24.9
F	55.7	42.1-68.4	63.3	54.5-73.3	59.1	50.6-67.0	54.2	46.2-61.9	33.9	26.8-41.8

Any Change to Improve Health in Next Year, PEI 2003
% of population age 15+, by health region

	WP		EP		Q		K	
	%	CI	%	CI	%	CI	%	CI
2001	43.2	38.4-48.0	44.1	39.8-48.4	50.1	46.6-53.7	41.2	37.1-45.4
2003	53.5	45.9-60.9	45.3	39.4-51.3	50.7	45.9-55.7	53.3	46.8-59.7

2. NON-MEDICAL DETERMINANTS OF HEALTH

2.13 Exposure to Second-hand Smoke

Definition: Non-smoking population aged 12 and over who reported exposure (at home) to second-hand smoke on most days in the month preceding the survey.

Sources: Statistics Canada: CTUMS 2000-2003

Data Table:

Exposure to Environmental Tobacco Smoke
% of children regularly exposed in home, by year

	PEI			Canada		
	0-11 yrs	12-17 yrs	0-17 yrs	0-11 yrs	12-17 yrs	0-17 yrs
2000	25	30	27	24	31	27
2001	26	28	27	19	27	22
2002	17	24	20	16	23	19
2003	16	21	18	14	19	16

2. NON-MEDICAL DETERMINANTS OF HEALTH

2.14 Food and Waterborne Diseases

Definition: Notifiable enteric diseases, expressed as a rate per 100,000 population. These include laboratory confirmed cases (PEI annual rate per 100,000 population for 2002 and 2003):

- *Shigella* *(36)*
- *Campylobacteriosis* *(28)*
- *Salmonella* *(14)*
- *E. coli* *(13)*
- *Giardia* *(9)*
- *Botulism* *(0)*

Excluded are *Staph. aureus*, and *Clostridium perfringens* since they are not reportable, and therefore incompletely captured.

Sources: Health Canada: Notifiable Diseases Summary, Can Comm Dis Rpt[14]

Data Table:

Notifiable Enteric Diseases
Rate per 100,000 population, by year

	PEI	Canada
1990	140	113
1991	85	120
1992	116	106
1993	105	106
1994	126	108
1995	65	99
1996	58	94
1997	73	94
1998	69	99
1999	71	82
2000	75	82
2001	61	72
2002	68	79
2003	60	65

APPENDIX

3. HEALTH SYSTEM PERFORMANCE

3.1 Unmet Health Needs

Definition: Population aged 12 and over who reported requiring health care, but had not received it. This is a measure of perceived access to care.

- Difficulty obtaining health services was indicated by persons aged 15 and over who required routine or on-going health services for self or a family member in the past 12 months

Sources: Statistics Canada: CCHS 2003, CCHS 2000/01[3], HSAS 2001, HSAS 2003[12]

Data Tables:

Unmet Health Need in past year
A.S. % of population age 12+, by year

	PEI		Canada	
	%	CI	%	CI
2001	12.1	11.0-13.3	12.7	12.5-12.9
2003	8.86	7.55-10.2	11.5	11.3-11.7

Unmet Health Need in past year, PEI 2003
% of population, by age and sex

	12-19 yr.		20-34 yr.		35-49 yr.		50-64 yr.		65+ yr.	
	%	CI	%	CI	%	CI	%	CI	%	CI
M	7.04	3.66-13.1	5.88	2.94-11.4	7.15	4.25-11.8	5.13	2.77-9.33	7.83	4.45-13.4
F	7.44	3.98-13.5	17	11.2-25.0	11.4	6.7-18.66	9.55	6.09-14.7	2.98	1.58-5.53

Unmet Health Need in past year, PEI
% of population age 12+, by health region

	WP		EP		Q		K	
	%	CI	%	CI	%	CI	%	CI
2001	7.84	5.66-10.8	10.8	8.43-13.7	14.5	12.3-17.1	7.39	5.48-9.88
2003	7.19	4.34-11.7	8.76	6.25-12.1	9.17	6.91-12.1	6.6	4.30-9.99

Difficulty Obtaining Primary Health Care Services, 2003 (% of population age 15+)

	PEI		Canada	
	%	CI	%	CI
Routine health services				
- during regular daytime hours	14	10.7-18.1	13	12.1-14.1
- during evenings or weekends	3.9	2.52-5.98	3.9	3.40-4.50
Health information or advice				
- during regular daytime hours	16	12.5-20.3	12.2	11.2-13.4
- during evenings or weekends	5.9	3.90-8.59	5.7	5.01-6.52
- at night	0.8	0.34-2.04	1.5	1.19-1.96
Immediate Care				
- during regular daytime hours	18.3	13.9-23.7	14.7	13.4-16.2
- during evenings or weekends	11.7	8.05-16.6	12	10.8-13.4
- at night	3.7	2.08-6.52	4.3	3.58-5.10

3. HEALTH SYSTEM PERFORMANCE

3.2 Wait time

Definition: Waiting times were asked of patients age 15+ accessing a service in the past 12 months. Wait time was reported by patients as the difference between the date of the initial attempt to schedule an appointment and the date of the actual visit. Services included:

- Specialist visit for new illness or condition - medical specialist such as cardiologist, allergist, gynecologist, psychiatrist, excluded optometrist
- Non-emergency surgery - cardiac, cancer, joint replacement, cataract, hysterectomy, removal of gallbladder, excluded dental surgery
- Diagnostic tests in non-emergency situation - CT scan, MRI (since 2004 in PEI), angiography (not available in PEI)

Wait times may be influenced by patient preference, treatment patterns of physicians, number of emergency surgeries with higher priority, nursing shortages, bed utilization strategies, and availability of appropriate prevention and follow-up care.

Sources: Statistics Canada: HSAS 2003, Health Services Access Survey 2001[12]

Data Tables:

Median Wait Time (weeks)

	PEI		Canada	
	2001	2003	2001	2003
Specialist Visit	3	4	4.3	4
Non-emergency Surgery	3	4.3	4.3	4.3
Diagnostic Tests	-	4.3	3	3

3. HEALTH SYSTEM PERFORMANCE

3.3 Patient Satisfaction

Definition: Percentage of the population aged 15 and over who accessed health care services, and rated themselves as either very satisfied or somewhat satisfied (on a 5 point scale) with the way the following services were provided:

- Any health care service in the past year
- Hospital services in the past year
- Physician services in the past year
- Community-based services in the past year (includes home nursing care, home-based counseling or therapy, personal care, and community walk-in clinics

Quality of Care Rating is patient-perceived quality of care received, rated as excellent or good (on a four point scale) on the same services.

Sources: Statistics Canada: CCHS 2003[3], Health Services Access Survey 2001[15]
Data Tables:

Patient Satisfaction and Quality of Care Rating
% of population age 15+, by year

		Satisfaction				Quality	
		PEI		Canada		PEI	Canada
		%	CI	%	CI	%	%
2001	Any health care service	88.9	86.7-90.8	84.6	84.1-85.2	89.5	84.7
	Physician care	94.9	93.2-96.2	91.9	90.5-91.3	93.9	89.9
	Hospital care	85.4	81.4-88.7	79.5	78.6-80.4	86.1	80.5
	Community care services	93.1	81.0-97.7	81.7	80.5-82.9	79.4	77.8
2003	Any health care service	88.9	86.0-91.4	86.7	86.1-87.3	90.2	88.1
	Physician care	95	92.5-96.7	92.3	91.7-92.8	94.6	92.3
	Hospital care	85.7	79.3-90.3	82.8	81.6-84.0	89	84.5
	Community care services	92.2	82.8-96.7	83.4	81.6-85.1	88.3	80.1

Patient Satisfaction with any health care service, PEI 2003
% of population, by age and sex

	15-19 yr.		20-34 yr.		35-49 yr.		50-64 yr.		65+ yr.	
	%	CI	%	CI	%	CI	%	CI	%	CI
M	95.5	86.3-98.6	91.7	78.6-97.1	83.7	70.3-91.8	86.7	77.3-92.6	94.5	85.3-98.1
F	92	76.9-97.5	93.4	86.6-96.8	83.2	72.9-90.1	86.2	74.2-93.1	92.2	86.0-95.8

Patient Satisfaction with any health care service, PEI
% of population age 15+, by health region

	WP		EP		Q		K	
	%	CI	%	CI	%	CI	%	CI
2001	92.6	89.1-95.1	90	84.6-93.6	86.4	82.1-89.7	90	85.4-93.2
2003	89.6	79.4-95.0	91.4	86.7-94.5	86.9	81.6-90.9	91.2	85.8-94.6

3. HEALTH SYSTEM PERFORMANCE

3.4 Influenza Vaccination

Definition: Population aged 12 and over who reported when they had their last influenza immunization (flu shot).

Sources: Statistics Canada: CCHS 2003, CCHS 2000/01[3]

Data Tables:

Flu Shot in past year
% of population age 65+, by year

	PEI		Canada	
	%	CI	%	CI
2001	62.4	57.8-66.8	63	61.6-64.3
2003	72.1	66.3-77.2	75.7	74.8-76.5

Flu Shot in past year, PEI 2003
% of population, by age and sex

	12-19 yr.		20-34 yr.		35-49 yr.		50-64 yr.		65+ yr.	
	%	CI	%	CI	%	CI	%	CI	%	CI
M	17.7	10.4-28.6	15.3	7.72-28.0	9.56	5.65-15.7	27	18.9-37.0	71.2	62.2-78.7
F	7.41	3.52-14.9	14.1	8.21-23.2	26.1	19.0-34.7	36.9	29.3-45.2	72.8	65.0-79.4

Flu Shot in past year, PEI
% of population age 65+, by health region

	WP		EP		Q		K	
	%	CI	%	CI	%	CI	%	CI
2001	54.2	43.3-64.6	60.5	51.5-68.8	66.9	59.2-73.8	57.5	48.7-65.8
2003	68.1	53.5-79.9	66.3	55.6-75.6	74.9	65.1-82.7	75.8	62.8-85.3

3. HEALTH SYSTEM PERFORMANCE

3.5 Mammography

Definition: Women aged 50 to 69 who self-reported they had their last mammogram for routine screening or other reasons in the past 2 years.

Sources: Statistics Canada: CCHS 2003, CCHS 2000/01[3], Breast Cancer Screening Programs[13]

Data Tables:

Mammogram within 2 years
% women age 50-69, by year

Source	Program		Self-report Survey			
	PEI	Canada	PEI		Canada	
	%	%	%	CI	%	CI
1997 & 1998	-	20	-	-	-	-
1999 & 2000	40	30	73.5	68.8-77.7	72.8	71.8-73.9
2002 & 2003	-	-	70.7	63.6-76.9	72.6	71.6-73.6

Mammogram within 2 years (self-report), PEI
% women age 50-69, by health region

	WP		EP		Q		K	
	%	CI	%	CI	%	CI	%	CI
2001	60	48.5-70.6	71	60.1-79.7	80	72.3-85.3	67	57.5-74.7
2003	67.8	52.1-80.3	76.9	63.0-86.8	71.6	58.8-81.6	62	49.1-73.4

3.6 Pap Screening

Definition: Women aged 20 to 69 with laboratory confirmation of Pap test in the past 3 years.

Surveys use self-report that they had their last Pap smear test in the past 3 years.

Sources: PEI Pap Screening Program[14]
Statistics Canada: CCHS 2003, CCHS 2000/01[3]

Data Tables:

Pap Smear within 3 years
% of women age 20-69, by year

Source	Program	Self-report Survey			
	PEI	PEI		Canada	
	%	%	CI	%	CI
1993 - 95	60	73.9	69.0-78.8	72	70.5-73.4
1996 - 98	62	81.4	76.9-85.9	76.2	74.8-77.6
1999 - 01	65	83.7	81.1-86.0	77.3	76.7-77.9
2001 - 03	-	78.2	74.7-81.4	70.1	70.5-71.7

Pap Smear within 3 years, PEI 1999-2001
% of women, by age group

	20-34 yr.	35-49 yr.	50-69 yr.
	%	%	%
F	69	67	57

Source: PEI Pap Screening Program

Pap Smear with in 3 years, PEI 1999-2001
% of women age 20-69, by health region

WP	EP	Q	K
%	%	%	%
58	58	68	69

Source: PEI Pap Screening Program

3.7 Blood Pressure

Definition: Population aged 21 to 84 who reported they had their blood pressure measured in the past year during a medical visit.

Sources: Statistics Canada: CCHS 2003, CCHS 2000/01[1]

Data Tables:

Blood Pressure taken in past year
% of population age 21-84, by year

	PEI		Canada	
	%	CI	%	CI
2001	77.8	75.8-79.7	76.6	76.2-77.0
2003	76.5	73.4-79.3	NA	-

Blood Pressure taken in past year, PEI 2003
% of population, by age and sex

	21-34 yr.		35-49 yr.		50-64 yr.		65-84 yr.	
	%	CI	%	CI	%	CI	%	CI
M	51.9	40.8-62.9	66.6	57.5-74.6	82	73.6-88.2	89.6	82.8-93.9
F	75.7	68.1-82.0	77.1	69.3-83.3	86.9	80.3-91.5	94.6	88.3-97.6

Blood Pressure taken in past year, PEI
% of population age 21-84, by health region

	WP		EP		Q		K	
	%	CI	%	CI	%	CI	%	CI
2001	76.1	71.7-80.1	75.6	71.4-79.4	78.2	74.9-81.2	80.8	77.0-84.0
2003	78	70-84.3	74.4	68.2-79.9	77.8	72.9-82	74.6	67.5-80.6

3. HEALTH SYSTEM PERFORMANCE

3.8 Vaccine Preventable Diseases

Definition: Notifiable communicable diseases that can be prevented by vaccines, expressed as a rate per 100,000 population. These include laboratory confirmed cases of the following diseases (PEI annual rate per 100,000 population averaged for 2002 and 2003):

- pertussis (whooping cough) (15)
- Hepatitis B (0.4)
- measles (0)
- mumps (0)
- *Haemophilus influenzae B* (0)
- rubella (0)
- diphtheria (0)
- tetanus (0)
- polio (Canada was officially certified polio-free in 1994) (0)
- meningococcal infections (0)

Excluded is chickenpox, which is incompletely captured at the laboratory for PEI. Varicella vaccination was added to the PEI Childhood Immunization Program in April 2000.

Sources: Health Canada: Notifiable Diseases Summary, Can Comm Dis Rpt[11]

Data Table:

Vaccine Preventable Disease
Incidence Rate per 100,000 population, by year

	PEI	Canada
1990	29.1	48.1
1991	4.6	46.6
1992	45.8	42.5
1993	47.6	41.3
1994	13.5	49.7
1995	10.4	54.4
1996	25.7	29.6
1997	34.3	34.7
1998	16.1	33.1
1999	15.2	24.8
2000	8.0	20.2
2001	7.2	13.8
2002	0.0	13.9
2003	30.6	9.5

3. HEALTH SYSTEM PERFORMANCE

3.9 Sexually Transmitted Infections

Definition: Notifiable sexually transmitted infections, expressed as a rate per 100,000 population. These include laboratory confirmed cases of the following diseases (PEI annual rate per 100,000 population averaged for 2002 and 2003):

- chlamydia (120.7)
- gonorrhea (0)
- syphilis (0)
- AIDS

Excluded is HIV, which includes individuals infected in previous years; reporting is not notifiable in all jurisdictions.

Sources: Health Canada: Notifiable Diseases Summary, Can Comm Dis Rpt[11]

Data Table:

Sexually Transmitted Infections
Incidence Rate per 100,000 population, by year

	PEI	Canada
1990	7.7	53.2
1991	78.3	208.4
1992	158.9	197.5
1993	105.0	180.2
1994	83.1	167.5
1995	84.6	151.3
1996	99.7	140.2
1997	105.8	137.2
1998	109.6	157.3
1999	111.8	167.5
2000	174.5	178.8
2001	114.1	184.3
2002	105.9	206.0
2003	135.5	216.9

3. HEALTH SYSTEM PERFORMANCE

3.10 Hospital Mortality

Definition: Risk adjusted (age, sex, co-morbidity) rate of all cause In-hospital death ocurring:
- Within 30 days of first admission to an acute care hospital with Acute Myocardial Infarction (AMI)
- Within 30 days of first admission to an acute care hospital with Stroke

Annual rate is averaged over a 3 year period.

Sources: Canadian Institute for Health Information, Hospital Morbidity Database[15]

Data Table:

Hospital Mortality Rate, 1999/00 to 2001/02
% population (risk adjusted for age, sex, and co-morbidities)

	PEI		Canada	
	%	CI	%	CI
AMI	12	9.8-14.2	11.8	-
Stroke	21.7	18.2-25.2	18.7	-

3. HEALTH SYSTEM PERFORMANCE

3.11 Preventable Hospitalizations

Definition: **Ambulatory care sensitive conditions** age-standardized inpatient acute care hospitalization rate per 100,000 population for conditions where appropriate ambulatory care (out-patient treatment) prevents or reduces the need for admission to hospital. Conditions include the following:

Most responsible diagnosis	ICD-9 code	ICD-10 code
Diabetes	250	E10, E11, E13, E14
Depression, neurotic disorders	300, 311	F32.0, F32.9, F34.1, F40, F41, F42, F44, F45.0/.1/.2, F48, F53.0, F68.0, F99
Drug and alcohol dependency	291, 292, 303, 304, 305	F10, F11, F12-19 (excluding F12.6, F13.6, F14.6, F15.6, F16.6, F17.6, F18.6, F19.6), F55
Hypertension	401, 402, 403, 404, 405	I1
Asthma	493	J45

While not all admissions for ambulatory care sensitive conditions are avoidable, it is assumed that appropriate prior ambulatory care could prevent the onset of this type of illness or condition, control an acute episodic illness or condition, or manage a chronic disease or condition. The "right" level of utilization is not known although a disproportionately high rate is presumed to reflect problems in obtaining access to primary care.

Source: Canadian Institute for Health Information, Hospital Morbidity Database[15]

Data Tables:

Ambulatory Care Sensitive Conditions
A.S. Rate per 100,000 population

	PEI			Canada		
	Male	Female	Total	Male	Female	Total
2000	1089	1244	1168	461	431	447
2001	1084	1081	1084	425	397	411
2002	1030	1153	1095	418	383	401
2003	1094	1111	1101	389	352	370
2004	915	865	888	367	325	346

Hospital discharge* for any condition
A.S. Rate per 100,000 population

	PEI	Canada
1995/96	13683	11171
1999/00	12071	9473
2000/01	11688	9138

* excludes newborns and patients in other types of care (eg. emergency wards, chronic care, rehab)

3.12 Hospital Readmissions

Definition: Risk adjusted (age, sex, co-morbidity) rate of unplanned re-admission to an acute care hospital within 28 days of discharge for:

- Acute Myocardial Infarction (AMI)
- Pneumonia
- Asthma

Readmission rates may be related to medication prescribed at initial discharge from hospital, patient compliance, quality of follow-up care in the community, quality and completeness of care during initial hospitalization. High readmission rates should lead to examination of any of the following: early discharge criteria, availability of appropriate community services, coordination between hospital and community providers, and patient education and instruction.

Sources: Canadian Institute for Health Information, Hospital Morbidity Database[15]

Data Table:

Hospital Readmissions, 2000-2001 to 2002-2003
% population (risk adjusted for age, sex, and co-morbidities)

	PEI		Canada	
	%	CI	%	CI
Asthma	5	2.9-7.2	5.1	-
Pneumonia	4.1	2.8-5.5	3.2	-
AMI	6.5	4.7-8.2	4.5	-

APPENDIX

4. COMMUNITY AND HEALTH SYSTEM CHARACTERISTICS

4.1 Health Expenditures

Definition: Public spending on health by provincial government, regional authorities, Worker's Compensation Board medical aid, and federal government. Expressed as current dollars (not adjusted for inflation) per capita. Categories:

- Hospitals: acute care
- Physicians
- Long term care institutions: nursing homes, residential care facilities
- Pharmacy: prescription drugs for seniors, social assistance, and other programs

Excluded are private sector expenditures by insurance, out-of-pocket household expenses, or private facilities. In PEI this is estimated as 30% of total health expenditures. Private expenses include:

- prescription drugs, over the counter drugs, and personal health supplies (45% of all private dollars spent on PEI)
- dentists, optometrists, opticians, chiropractors, and other professionals (28% of all private dollars spent on PEI)
- private nursing homes and care facilities (16% of all private dollars spent on PEI)
- other expenses such as insurance fees, hearing aids, hospital fees for parking and preferred accommodations (11% of all private dollars spent on PEI)

Source: Canadian Institute for Health Information: National Health Expenditure Database[16]

Data Tables:

PEI Public Health Expenses, 2002/03 ($)
by use of funds

Health Care		Social Services	
Hospital Services	128,742,300	Child & Family Services	64,111,400
Physician Services	50,209,600	Job Creation	2,058,400
Blood Services	4,482,500	Social Housing	8,944,200
Ambulance Services	3,750,000	Grants - Non Gov't Organizations	6,460,800
Home Care	7,019,300		
Continuing Care	40,057,100		
Provincial Pharmacy	17,208,100		
Mental Health	12,146,300		
Public Health Nursing	2,742,300		
Addiction Services	6,055,500		
Dental Public Health	2,466,400		
East Prince Health Facility	17,089,800		
Other Programs	36,651,200		

Source: PEI Ministry of Health and Social Services Annual Report[17]

4. COMMUNITY AND HEALTH SYSTEM CHARACTERISTICS

4.1 Health Expenditure Data Tables continued:

Public Health Expenditures
$ per capita (not adjusted for inflation)

	PEI	Canada
1985	1005	1165
1986	1075	1247
1987	1164	1327
1988	1261	1425
1989	1340	1537
1990	1427	1641
1991	1563	1761
1992	1598	1821
1993	1647	1810
1994	1622	1814
1995	1652	1798
1996	1709	1780
1997	1679	1834
1998	1794	1953
1999	1880	2078
2000	2037	2241
2001	2255	2394
2002 f	2543	2526
2003 f	2706	2681

Public Health Expenditures, PEI 2001
$ per capita, by age and sex

	<1	1 – 4	5 – 14	15 – 44	45 – 64	65 – 74	75 – 84	85+
Total								
M	4757	1336	797	903	1856	4590	8691	13645
F	4373	762	765	1390	1709	3810	8653	14969
Hospital								
M	3452	235	141	270	981	2755	5236	7734
F	3478	175	136	611	748	2005	4444	6297
Physician								
M	883	659	116	136	317	596	794	787
F	474	145	96	301	373	553	727	679
Institutions								
M	0	0	3	39	56	382	1765	4180
F	0	0	0	12	61	359	2418	6938

4.2 Hospitalization Rates by Cause

Definition: Hospitalizations include discharges and deaths for inpatients in acute care hospitals, excluding same day surgery (outpatient) cases and patients admitted to psychiatric or rehabilitation facilities. Primary diagnosis captured:

- Heart and Stroke (390-459) including heart attack, stroke, and other circulatory diseases
- Respiratory (460-519) includes flu, pneumonia, asthma, chronic obstructive pulmonary dis
- Digestive (520-579) includes appendicitis, gallstones, inguinal hernia
- Pregnancy (630-676) including delivery and complications
- Ill-defined (780-799)
- Mental disorders (290-319) including alcohol, drug dependency, schizophrenia, psychoses
- Injury (800-999) including fractures, wounds, burns, poisons
- Cancer (ICD-9 140-239) all malignant cancers including lung, colorectal, breast, prostate

Rates per 100,000 population are not age-standardized; some other hospitalization rates provided by CIHI are age-standardized. Data are reported based on the region of the patient's residence, not region of hospitalization. Rates are based on a fiscal year (April to March) and use October 1st population estimates.

Source: CIHI: Hospital Morbidity Database[15]

Data Tables:

Hospital Separations by Cause
Rate per 100,000 population, by year and sex

		Total		Male		Female	
Cause	Year	PEI	Canada	PEI	Canada	PEI	Canada
Heart Disease & Stroke	1998	1662	1527	1606	1742	1522	1316
	2002	1513	1396	1717	1656	1317	1249
Respiratory	1998	1805	964	1821	1026	1789	903
	2002	1593	797	1742	884	1450	780
Digestive	1998	1558	1111	1346	1074	1763	1147
	2002	2475	988	2173	1016	2765	1070
Pregnancy	1998	1383	1437	0	0	2724	2846
	2002	1144	1272	0	0	2245	2555
Mental Disorders	1998	840	561	708	513	969	608
	2002	1017	617	911	496	1119	574
Ill-defined	1998	1138	585	1083	562	1192	607
	2002	1000	-	923	-	1075	-
Injury	1998	787	831	754	885	819	777
	2002	707	766	682	835	745	744
Cancer	1998	790	717	709	643	868	790
	2002	834	690	742	620	922	777

4. COMMUNITY AND HEALTH SYSTEM CHARACTERISTICS

4.2 Hospitalization Rates Data Tables, continued:

Hospital Separations, all causes, PEI 2002
rate per 100,000, by age and sex

	< 20	20-34 yr.	35-49 yr.	50-64 yr.	65+ yr.
M	9246	4360	6846	14632	44998
F	8968	17098	13166	14684	37682

Hospital Separations, all causes, PEI 2002
rate per 100,000, by health region

WP	EP	Q	K	PEI
19244	20253	11453	13988	14796

4.3 Visits to Health Professionals

Definition: Population aged 12 and over who have consulted with a medical doctor/pediatrician, mental health professional, dentist, chiropractor, or alternative care providers in the past 12 months.

Medical doctor includes family or general practitioners as well as specialists such as surgeons, allergists, orthopaedists, gynaecologists, or psychiatrists.

Alternative health care providers include: massage therapists, acupuncturists, homeopaths or naturopaths, Feldenkrais or Alexander teachers, relaxation therapists, biofeedback teachers, rolfers, herbalists, reflexologists, spiritual healers, religious healers, etc. Chiropractor visits are indicated separately.

Sources: Statistics Canada: CCHS 2003, CCHS 2000/01[3]

Data Tables:

Visits to Health Professionals
A.S. % of population age 12+, 2003

	PEI		Canada	
	%	CI	%	CI
Physician	83	81.3-84.7	76.9	76.6-77.1
Dental	64.8	62.7-66.9	63.9	63.7-64.2
Mental Health	6.94	5.76-8.12	7.59	7.41-7.77
Chiropractor	4.35	3.43-5.28	11.4	11.2-11.6
Alternative	7.12	5.95-8.30	12.6	12.4-12.8

Visits to Health Professionals, PEI 2003
% of population, by age and sex

	12-19 yr.		20-34 yr.		35-49 yr.		50-64 yr.		65+ yr.	
	%	CI	%	CI	%	CI	%	CI	%	CI
Physician										
M	79.3	71.0-85.7	68.7	57.6-78.0	70.2	61.7-77.5	77	68-84	94.1	89.8-96.7
F	80.8	71.9-87.3	92.5	87.8-95.5	92.6	87.6-95.7	90.4	83.2-94.7	93.3	87.7-96.5
Dental										
M	87.7	80.3-92.5	60	49.4-69.7	60.3	51.3-68.7	55.2	46.1-64.0	37.5	29.9-45.9
F	83.5	75.1-89.5	68.9	61.0-75.9	76.3	68.7-82.5	66.8	59.4-73.4	46.8	39.6-54.2
Mental Health										
M	3.64	1.16-10.9	3.63	1.38-9.22	3.16	1.36-7.15	1.21	0.37-392	0.65	0.16-2.61
F	6.13	2.65-13.6	13	8.39-19.7	17.4	11.5-25.4	5.91	3.36-10.2	2.93	1.08-7.70
Chiropractor										
M	1.84	.567-5.8	4.87	1.71-13.1	5.11	1.69-14.5	4.82	2.15-10.5	3.17	1.45-6.77
F	3.7	1.35-9.73	4.52	2.32-8.63	4.8	2.31-9.7	5.01	2.48-9.86	2.63	.662-9.83
Alternative Care										
M	2.7	.751-9.23	8.51	3.98-17.3	2.53	1.11-5.69	3.15	1.42-6.86	0.47	.107-2.04
F	4.07	1.76-9.12	10.3	5.77-17.7	13.4	9.1-19.3	12.5	8.34-18.3	4.18	2.18-7.88

4. COMMUNITY AND HEALTH SYSTEM CHARACTERISTICS

4.3 Visits to Health Professionals, Data Tables continued:

Visits to Health Professionals, PEI 2003
% of population age 12+, by health region

	WP		EP		Q		K	
	%	CI	%	CI	%	CI	%	CI
Physician	79.3	72.7-84.6	78.7	72.7-83.7	86.9	83.5-89.7	82.3	76.8-86.7
Dental	46.5	39.4-53.7	66.3	61.0-71.3	70.2	65.9-74.2	56.1	49.9-62.1
Mental Health	2.62	1.14-5.91	6.28	3.85-10.1	6.99	4.97-9.77	8.66	5.58-13.2
Chiropractor	2.17	.835-5.52	4.46	2.39-8.18	4.91	3.18-7.51	3.36	1.69-6.56
Alternative	5.9	3.31-10.3	7.34	4.76-11.2	7.29	5.36-9.86	5.67	3.37-9.4

Physician Visits, 2003

	PEI		Canada	
	%	CI	%	CI
Has regular family doctor (% pop'n 12+)	92	90.7-93.2	84.9	84.7-85.1
Physical Checkup (% of population with physician visit in past yr)	40	37.6-42.3	10.6	10.4-10.8

4. COMMUNITY AND HEALTH SYSTEM CHARACTERISTICS

4.4 Home Care

Definition: Population age 12+ that reported receiving home care services with the cost entirely or partially covered by government. Eg. Nursing care, help with bathing, help around the home, physiotherapy, counseling, meal delivery.

Patients use home care services for: long term chronic illness (continuing care), acute care substitution, disabilities, palliative care, and dialysis.

Sources: Statistics Canada: CCHS 2003, CCHS 2000/01[3]

Data Tables:

Home Care Use in past year
% of population age 75+, by year

	PEI		Canada	
Year	%	CI	%	CI
2001	14.3	10.4-19.4	NA	-
2003	14.6	9.85-21.1	14.6	13.7-15.6

Home Care Use in past year, PEI 2003
% of population, by age and sex

	< 65 yr.		65-74 yr.		75-79 yr.		80 + yr.	
	%	CI	%	CI	%	CI	%	CI
M	0.243	0.051-1.15	2.74	0.90-8.02	14.1	5.09-33.4	18.3	8.16-36.2
F	2.77	1.44-5.24	3.32	1.34-7.99	8.15	2.89-20.9	17.5	9.74-29.5

Home Care Use in past year, PEI 2003
% of population age 75+, by health region

WP		EP		Q		K		PEI	
%	CI	%	CI	%	CI	%	CI	%	CI
26.6	13.3-46.0	10.4	4.73-21.5	14.8	7.93-26.1	13.5	5.0-31.5	14.6	9.82-21.2

4. COMMUNITY AND HEALTH SYSTEM CHARACTERISTICS

4.5 Social Assistance

Definition: Social Assistance monthly caseloads averaged over the fiscal year

Social assistance provides income for families in financial need.

Sources: PEI Social Assistance Program

Data Table:

Social Assistance Caseload by Fiscal Year (average monthly # cases)

Year	PEI
1995/96	5741
1996/97	5562
1997/98	5465
1998/99	5143
1999/00	4668
2000/01	4213
2001/02	4135
2002/03	3999
2003/04	3927

4. COMMUNITY AND HEALTH SYSTEM CHARACTERISTICS

4.6 Population and Projections

Definition: The number of people living in a geographic area by age and sex. Population data provide the "denominators" used to calculate rates for most health indicators.

- PEI Medicare Registry counts the number of persons eligible for health services in Prince Edward Island. Excluded are recent residents of less than 3 months
- Statistics Canada estimates population using data derived from the Census, and administrative sources on births, deaths, and migration
- Population projections use the medium growth assumption and are based on the 2001 population estimates derived from the 1996 census. Projections are based on the regional cohort component method that uses age and sex specific survival rates and fertility rates, and allows for immigration, emigration, non-permanent residents and interprovincial migration

Sources: Statistics Canada, Demography Division[18]
PEI Medicare Registry

Data Tables:

PEI Population, 2004
Counts by health region

	K	Q	EP	WP	PEI
Males					
<20	2,758	8,680	4,306	1,998	17,742
20-34	2,128	6,934	3,170	1,518	13,750
35-49	2,369	7,703	3,900	1,687	15,659
50-64	1,973	6,570	3,066	1,351	12,960
65+	1,423	3,984	2,192	945	8,544
75+	620	1,595	915	364	3,494
Female					
<20	2,669	8,346	4,107	1,998	17,120
20-34	1,941	7,162	3,184	1,447	13,734
35-49	2,283	8,406	4,018	1,587	16,294
50-64	1,941	6,910	3,097	1,326	13,274
65+	1,700	5,533	2,832	1,138	11,203
75+	872	2,973	1,453	569	5,867
Total	21,185	70,228	33,872	14,995	140,280
% 65+	14.5%	13.4%	14.7%	13.7%	13.9%

Source: PEI Medicare Registry, mid-year counts on July 1

4. COMMUNITY AND HEALTH SYSTEM CHARACTERISTICS

4.6 Population and Projections, Data Tables continued:

PEI Population Projections
Counts by year, age and sex

	2001 Actual	2006	2011	2016	2021	2026
PEI Males						
<20	18,829	17,080	15,267	13,931	13,146	12,575
20-34	12,811	12,846	13,359	13,355	12,200	10,710
35-49	15,563	15,167	13,920	12,669	12,790	13,279
50-64	11,609	13,576	15,260	15,821	15,412	14,163
65+	7,879	8,534	9,654	11,839	13,832	15,616
PEI Females						
<20	18,123	16,822	15,307	14,230	13,698	13,110
20-34	13,158	13,436	14,214	14,328	13,235	11,771
35-49	16,205	16,048	14,746	13,538	13,665	14,224
50-64	11,747	13,876	16,072	16,985	16,707	15,296
65+	10,748	11,295	12,461	14,685	16,975	19,615
Total	136,672	138,680	140,260	141,380	141,659	140,360
PEI (% 65+)	13.6	14.3	15.8	18.8	21.7	25.1

Source: Stats Can. Provided by:
Provincial Treasury, Economics, Statistics and Federal Fiscal Relations Division, November 2004

APPENDIX